# Title 15: Mississippi State Department of Health

Part 22: Medical Cannabis Program

**Subpart 1: Cannabis Testing Facilities** 

### **Chapter 1 REGULATIONS FOR CANNABIS TESTING FACILITY**

#### **Subchapter 1 General Provisions:**

Rule 1.1.1. Legal Authority: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Rule 1.1.2** Definitions.

- 1. "Accreditation" means being currently deemed as technically competent under ISO/IEC 17025:2017 by any of the following accrediting organizations:
  - a. American Association of Approved laboratory Accreditation,
  - b. Perry Johnson Approved laboratory Accreditation,
  - c. American National Standards Institute (ANSI) National Accreditation Board, or
  - d. International Accreditation Services.
- 2. "Accreditation body" means an impartial organization that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement for Testing, and which requires laboratories to conform to ISO/IEC 17025, the general requirements for the competence of laboratories established by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).
- 3. "Analytical Batch" means a set of no more than twenty samples that are prepared together for the same type of analysis, are sequentially analyzed using the same instrument calibration curve, and have common analytical quality control requirements. The batch shall include testing samples as well as all applicable quality control samples, to include one method blank, duplicate laboratory fortified blanks, and duplicate matrix spikes, as required by the analytical method.
- 4. "Cannabis" means all parts of the plant of the genus cannabis, the flower, the seeds thereof, the resin extracted from any part of the plant and every

compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or its resin, including whole plant extracts. Such term shall not mean cannabis-derived drug products approved by the federal Food and Drug Administration under Section 505 of the Federal Food, Drug, and Cosmetic Act.

- 5. "Cannabis products" means cannabis flower, concentrated cannabis, cannabis extracts and products that are infused with cannabis or an extract thereof and are intended for use or consumption by humans. The term includes, without limitation, edible cannabis products, beverages, topical products, ointments, oils, tinctures and suppositories that contain tetrahydrocannabinol (THC) and/or cannabidiol (CBD) except those products excluded from control under Sections 41-29-113 and 41-29-136, Mississippi Code of 1972, as amended.
- 6. "Cannabis testing facility" or "testing facility" means an independent entity licensed and registered by the Mississippi Department of Health that analyzes the safety and potency of cannabis.
- 7. "Concentrate" means a substance obtained by separating cannabinoids from cannabis by any of the following methods:
  - a. A mechanical extraction process;
  - b. A chemical extraction process using a nonhydrocarbon-based or other solvent, such as water, vegetable glycerin, vegetable oils, animal fats, food-grade ethanol or steam distillation; or
  - c. A chemical extraction process using the hydrocarbon-based solvent carbon dioxide, provided that the process does not involve the use of high heat or pressure.
- 8. "Department" means the Mississippi State Department of Health
- 9. "Disqualifying felony offense" means:
  - a. A conviction for a crime of violence, as defined in Section 97-3-2; 335, Mississippi Code of 1972, as amended
  - b. A conviction for a crime that was defined as a violent crime in the law of the jurisdiction in which the offense was committed, and that was classified as a felony in the jurisdiction where the person was convicted; or
  - c. A conviction for a violation of a state or federal controlled substances law that was classified as a felony in the jurisdiction where the person was convicted, including the service of any term of probation, incarceration or supervised release within the previous five (5) years and the offender has not committed another similar offense since the conviction. Under this subparagraph (iii), a disqualifying felony offense shall not include a conviction that

consisted of conduct for which this chapter would likely have prevented the conviction but for the fact that the conduct occurred before the effective date of this act.

- 10. "Edible cannabis products" means products that:
  - a. Contain or are infused with cannabis or an extract thereof;
  - b. Are intended for human consumption by oral ingestion; and
  - c. Are presented in the form of foodstuffs, beverages, extracts, oils, tinctures, lozenges and other similar products.
- 11. "Laboratory Control Sample" (LCS) means a blank matrix to which known concentrations of each of the target method analytes are added. The spiked concentration must be at a mid-range concentration of the calibration curve for the target analytes. The LCS is analyzed in the same manner as the representative sample.
- 12. "Laboratory replicate sample" means a sub-sample taken of the representative sample used for laboratory quality control purposes to demonstrate reproducibility. It is prepared and analyzed in the identical manner as the representative sample. The results from replicate analyses are used to evaluate analytical precision.
- 13. "Limit of detection" (LOD) means the lowest quantity of a substance or analyte that can be distinguished from the absence of that substance within a stated confidence limit.
- 14. "Limit of quantitation" (LOQ) means the minimum concentration of an analyte in a specific matrix that can be reliably quantified while also meeting predefined goals for bias and imprecision.
- 15. "Linear regression" means the determination, in analytical chemistry, of the best linear equation for calibration data to generate a calibration curve. The concentrate of an analyte in a sample can then be determined by comparing a measurement of the unknown to the calibration curve. A linear regression uses the following equation: y = mx + b; where m = slope, b = intercept.
- 16. "Matrix" means the substances that are present in a sample except for the analyte(s) of interest.
- 17. "Matrix spike sample" means a sample prepared by adding a known quantity of each of the target analyte to a sample matrix or to a matrix that is as closely representative of the matrix being analyzed as possible. The spiked concentration must be at a mid-range concentration of the calibration curve for the target analytes.
- 18. "Medical cannabis establishment" means a cannabis cultivation facility, cannabis processing facility, cannabis testing facility, cannabis dispensary,

- cannabis transportation entity, cannabis disposal entity or cannabis research facility licensed and registered by the appropriate agency.
- 19. "Medical cannabis establishment agent" means an owner, officer, board member, employee, volunteer or agent of a medical cannabis establishment.
- 20. "Method Blank" means an analyte free matrix to which all reagents are added in the same volumes or proportions as used in the sample preparation and is processed in exactly the same manner as the samples.
- 21. "Moisture content" means the percentage of water in a sample, by weight.
- 22. "Percent recovery" means the percentage of a measured concentration relative to the added (spiked) concentration in a reference material or matrix spike sample. A laboratory shall calculate the percent recovery by dividing the sample result by the expected result then multiplying the quotient by 100.
- 23. "Practitioner" means a physician, certified nurse practitioner, physician assistant or optometrist who is licensed to prescribe medicine under the licensing requirements of their respective occupational boards and the laws of this state.
- 24. "Principal Officer" means persons who have ultimate responsibility for implementing the decisions of the cannabis testing facility and, include but are not limited to, the Chief Executive Officer, Chief Administrative Officer, Chief Financial Officer as applicable.
- 25. "School" means an institution for the teaching of children, consisting of a physical location, whether owned or leased, including instructional staff members and students, and which is in session each school year. This definition shall include, but not be limited to, public, private, church and parochial programs for kindergarten, elementary, junior high and high schools. Such term shall not mean a home instruction program.
- 26. "Seed-to-Sale System" means the specialized inventory management system utilized throughout the medical cannabis program that allows for the tracking of cannabis from early life cycle until final sale.
- 27. "THC" or "Tetrahydrocannabinol" means any and all forms of tetrahydrocannabinol that are contained naturally in the cannabis plant, as well as synthesized forms of THC and derived variations, derivatives, isomers and allotropes that have similar molecular and physiological characteristics of tetrahydrocannabinol, including, but not limited to, THCA, THC Delta 9, THC Delta 8, THC Delta 10 and THC Delta 6.
- 28. "Usable Marijuana" means any marijuana product intended for sale or distribution and intended for use or consumption by qualifying patients as defined in the Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.3 All cannabis testing facility laboratory operations must be physically located within the State of Mississippi.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.4 All cannabis testing facilities must be currently licensed and registered by the Department and adhere to all regulations set forth by the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.5 No cannabis testing facilities shall be within one thousand (1,000) feet of the nearest property boundary line of a school, church or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facilities' application unless the cannabis testing facility has received approval from the school, church or child care facility and received a waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.6 A cannabis testing facility may be located in any area in a municipality or county that is zoned as commercial or for which commercial use is otherwise authorized or not prohibited.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.7 A cannabis testing facility shall not employ an agent or employee who also is employed or has ownership at any other medical cannabis establishment.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.8 To be licensed and registered by the Department, Cannabis testing facilities must be accredited as defined in this Chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.1.9 To be licensed and registered by the Department, Cannabis testing facilities must be accredited for testing at least one analyte required by the Department
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.10 Cannabis testing facilities shall test for cannabis-related analytes for which they have ISO/IEC 17025:2017 accreditation and Department registration.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.11 Cannabis testing facilities shall only employ persons who are at least 21 years of age and possess a current work permit issued by the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.12 Cannabis testing facilities shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned function.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.13 Cannabis testing facilities shall conduct a fingerprint-based background check of the Mississippi Central Criminal Database and the Federal Bureau of Investigation Criminal History Database on every person seeking to become a principal officer, board member, agent, volunteer, or employee before the person begins working at the Cannabis testing facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.14 Cannabis testing facilities shall not employ a medical cannabis establishment agent, as defined in this Chapter, who has been convicted of a disqualifying felony offense.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.15 Cannabis testing facilities shall ensure, document, and provide to the Department upon request, documentation that each medical cannabis establishment agent, as defined by this Chapter, meets the requirements of the Mississippi Medical Cannabis Act, and Department regulations.

- Rule 1.1.16 Cannabis testing facilities shall employ a full-time supervisor or management employee who must be responsible for the following:
  - 1. Overseeing and directing the scientific methods of the cannabis testing facility;
  - 2. Ensuring that the cannabis testing facility achieves and maintains a cannabis testing facility quality assurance program; and
  - 3. Providing ongoing and appropriate training to cannabis testing facility employees.
  - 4. To be considered qualified, the supervisor or management employee must have at minimum:
    - a. A doctoral degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university;
    - b. A master's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 2 years of full-time practical experience;
    - c. A bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 4 years of full-time practical experience; or
    - d. A bachelor's degree in any field from an accredited college or university, plus at least 8 years of full-time practical experience, 4 years of which must have been in a supervisory or management position.

- Rule 1.1.17 Cannabis testing facilities shall employ a full-time analyst who, at minimum must have either of the following:
  - 1. Earned a master's degree or a bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university; or
  - 2. Completed 2 years of college or university education that included coursework in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 3 years of full-time practical experience.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.18 Cannabis testing facilities shall maintain operating documents that must include procedures for the oversight of the Cannabis testing facility and procedures to ensure accurate record keeping and adequate security measures.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.19 Cannabis testing facilities shall implement appropriate security measures designed to deter and prevent the theft of medical cannabis and unauthorized entrance into the areas containing medical cannabis.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.20 Cannabis testing facilities shall notify the Department within one (1) business day of any theft or loss of medical cannabis.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.21 Cannabis testing facilities shall not share office space with or refer patients to a practitioner.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.22 Cannabis testing facilities are subject to inspection by the Department during business hours, including but not limited to, inspection of the physical cannabis testing facility, interviews of personnel, review, inspection, and audit of records and documents related to the analyses of dispensary samples to verify compliance with this Chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.23 Cannabis testing facilities shall use the statewide seed-to-sale tracking system certified by the Department and provide reports as required by the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.24 Cannabis testing facilities shall notify the Department within one (1) business day if there is a change of ownership or closure of the entity.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.25 Cannabis testing facilities shall not allow an individual who is younger than twenty-one (21) years old to enter the premises of the cannabis testing facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.26 Cannabis testing facilities shall create and require the display of an identification badge for each medical cannabis establishment agent.

#### **Subchapter 2 Documentation Requirements for Applicants**

- Rule 1.2.1 All applicants for a cannabis testing facility registration certificate and cannabis testing facility license must complete the application document required by the Department and include the documentation outlined in this Subchapter, pay the appropriate nonrefundable application fees to the Department, and be registered and licensed by the Department prior to initiating any testing related to medical cannabis.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.2.2 All information and documents required by the Department, including but not limited to, the following must accompany an application for cannabis testing facility registration and licensing:
  - 1. The legal name of the prospective cannabis testing facility;
  - 2. The physical address of the prospective cannabis testing facility, which shall not be within one thousand (1,000) feet of the nearest property boundary line of a school, church, or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facility application unless the proposed entity has received approval from the school, church or child care facility and received the applicable waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility;
  - 3. The name of each owner, principal officer, board member, and lab director of the proposed cannabis testing facility;

- 4. An attestation that the information provided to the Department to apply for a cannabis testing facility registration and license is true and correct;
- 5. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;
- 6. For each owner:
  - a. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;
  - b. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a cannabis dispensary, cannabis cultivation facility, cannabis processing facility, cannabis transportation entity, cannabis disposal entity or cannabis research facility.
  - c. An attestation signed and dated by the owner pledging not to divert cannabis to any individual who or entity that is not allowed to possess cannabis.
- 7. Verification for each principal officer or board member that they are at least 21 years of age;
- 8. A valid certificate of accreditation, issued by an accreditation body, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:
  - a. Cannabinoids;
  - b. Heavy metals;
  - c. Microbial impurities;
  - d. Mycotoxins;
  - e. Residual pesticides;
  - f. Residual solvents and processing chemicals;
  - g. Terpenoids;
  - h. Foreign Material
- 9. A copy of the cannabis testing facility's most recent assessment by the laboratory's accreditation body, the laboratory's responses to any findings of non-compliance with standards or recommendations, and the corrective actions taken by the laboratory to address the findings or recommendations:

- 10. Laboratory standard operating procedures for all testing methods;.
- 11. Laboratory test method verification and validation documentation for all testing methods, including final data reports approved by the laboratory director, validation material package inserts and all supporting data including instrument raw data and calculation tools;
- 12. Laboratory standard operating procedures for security measures;
- 13. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;
- 14. Laboratory standard operating procedures for the transportation of cannabis or cannabis products
- 15. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products:
- 16. Testing staff initial demonstration of capability for all applicable tests.

### Rule 1.2.3 Application and Licensing Fees:

- 1. One-time nonrefundable license application fee \$10,000
- 2. Annual licensing fee \$15,000
- 3. All payments must be made through the Department's electronic payment system.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

### **Subchapter 3 Cannabis Testing Facility License Renewal**

Rule 1.3.1 Each Cannabis testing facilities must submit a completed renewal license application and appropriate renewal fee thirty (30) days prior to its current license expiration date.

- Rule 1.3.2 All information and documents required by the Department, including but not limited to, the following must accompany a renewal application for cannabis testing facility registration and licensing:
  - 1. The legal name of the cannabis testing facility;

- 2. The name of each principal officer and board member of the cannabis testing facility;
- 3. An attestation that the information provided to the Department to apply for a cannabis testing facility renewal license is true and correct;
- 4. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

#### 5. For each owner:

- a. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;
- b. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and
- c. An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis.
- 6. Verification for each principal officer or board member that they are at least 21 years of age;
- 7. A valid certificate of accreditation, issued by an accreditation organization, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:
  - a. Cannabinoids:
  - b. Heavy metals;
  - c. Microbial impurities;
  - d. Mycotoxins;
  - e. Residual pesticides;
  - f. Residual solvents and processing chemicals;
  - g. Terpenoids;
  - h. Foreign materials.
- 8. Laboratory standard operating procedures for all testing methods;.

- 9. Laboratory test method verification or validation documentation for all testing methods, including final reports signed by the laboratory director, validation material package inserts and all supporting instrument raw data and calculation tools;
- 10. Laboratory standard operating procedures for security measures;
- 11. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;
- 12. Laboratory standard operating procedures for the transportation of cannabis or cannabis products
- 13. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products;
- 14. Testing staff ongoing demonstration of competency documentation.

#### Rule 1.3.3 Renewal Fee:

- 1. Annual renewal fee \$15,000
- 2. All payments must be made through the Department's electronic payment system.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.3.4 To maintain an active license and registration certificate, cannabis testing facilities must maintain accreditation, as defined in this Chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.3.5 Any loss of accreditation status by a cannabis testing facility will result in immediate revocation of the license and registration of the cannabis testing facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.3.6 Any cannabis testing facility that has a license and registration revoked for failure to maintain accreditation, as defined in this Chapter, may file a written petition to the Department to reinstate the cannabis testing facilities' registration and license once the cannabis testing facility submits proof of accreditation, as defined in the

Chapter. A reinstatement of registration or license is required prior to the cannabis testing facility resuming cannabis testing operations.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

### **Subchapter 4 Cannabis Testing Facility Change of Ownership**

Rule 1.4.1 Cannabis testing facilities must submit a completed change of ownership license application within one (1) day if there is a change of ownership.

- Rule 1.4.2 All information and documents required by the Department, including but not limited to, the following must accompany a change of ownership application for cannabis testing facility registration and licensing:
  - 1. The legal name of the cannabis testing facility;
  - 2. The name of each principal officer and board member of the cannabis testing facility;
  - 3. An attestation that the information provided to the Department regarding the change of ownership for a cannabis testing facility is true and correct;
  - 4. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;
  - 5. For each owner:
    - a. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;
    - b. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and
    - An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis;
  - 6. Verification for each principal officer or board member that they are at least 21 years of age.

### **Subchapter 5: Testing Requirements and Standards**

# Rule 1.5.1 Testing Requirements for Usable Marijuana

- 1. A cultivation facility or processing facility shall test every batch of usable marijuana, in its final form, intended for sale or distribution to a qualified patient or caregiver, prior to selling or transferring the usable marijuana for the following:
  - a. Pesticides in accordance with Rule 1.5.4 of this Chapter;
  - b. Water activity and moisture content in accordance with Rule 1.5.6 of this Chapter;
  - c. THC and CBD concentration in accordance with Rule 1.5.7 of this Chapter;
  - d. Heavy Metals in accordance with Rule 1.5.8 of this Chapter;
  - e. Mycotoxins in accordance with Rule 1.5.9 of this Chapter;
  - f. Microbiological contaminants in accordance with Rule 1.5.3 of this Chapter;
  - g. Terpenes in accordance with Rule 1.5.10 of this Chapter;
  - h. Foreign material in accordance with Rule 1.5.11 of this Chapter.
- 2. A cultivation facility or processing facility shall test every batch of usable marijuana intended for sale or distribution to a qualified patient or caregiver for water activity and moisture content in accordance with Rule 1.5.6 of this Chapter, unless the cultivation facility or processing facility uses a method of processing that results in effective sterilization.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

### Rule 1.5.2 Testing Requirements for Concentrates, Extracts, and Edibles

- 1. A cultivation facility or processing facility shall test every process lot of cannabinoid concentrate, extract or edible for sale or distribution to a qualified patient prior to selling or transferring the cannabinoid concentrate, extract or edible for the following:
  - a. Microbial impurities in accordance with Rule 1.5.3 of this Chapter;

- b. Pesticides in accordance with Rule 1.5.4 of this Chapter;
- c. Solvents in accordance with Rule 1.5.5 of this Chapter;
- d. THC and CBD concentration in accordance with Rule 1.5.7 of this Chapter;
- e. Heavy Metals in accordance with Rule 1.5.8 of this Chapter;
- f. Mycotoxins in accordance with Rule 1.5.9 of this Chapter;
- g. Terpenes in accordance with Rule 1.5.10 of this Chapter;
- h. Foreign material in accordance with Rule 1.5.11 of this Chapter.
- 2. A cultivation facility or processing facility is exempt from testing for solvents under this rule if the cultivation facility or processing facility:
  - a. Did not use any solvent listed in Appendix A, Table 2; and
  - b. Used a mechanical extraction process to separate cannabinoids from the marijuana; or
  - c. Used only water, animal fat or vegetable oil as a solvent to separate the cannabinoids from the marijuana.
- 2. A cultivation facility or processing facility shall test a process lot of a cannabinoid concentrate or extract for microbiological contaminants in accordance with Rule 1.5.3 of this Chapter, or upon written request by the Department.

#### Rule 1.5.3 Standards for Testing Microbiological Contaminants

- 1. Usable marijuana required to be tested for microbiological contaminants shall be sampled using appropriate aseptic technique and tested by a Mississippi licensed and registered cannabis testing facility for microbial impurities.
- 2. The cannabis testing facility shall report the result of the microbial impurities testing by indicating "pass" or "fail" on the Certificate of Analysis.
- 3. The sample of inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if all of the following conditions are met:
  - a. Shiga toxin–producing Escherichia coli is not detected in 1 gram;
  - b. Salmonella spp. is not detected in 1 gram; and

- c. Pathogenic Aspergillus species A. fumigatus, A. flavus, A. niger, and A. terreus are not detected in 1 gram.
- 4. The sample of non-inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if both the following conditions are met:
  - a. Shiga toxin-producing Escherichia coli is not detected in 1 gram, and
  - b. Salmonella spp. is not detected in 1 gram.
- 5. If the sample fails microbial impurities testing, the batch from which the sample was collected fails microbial impurities testing and shall not be released for retail sale.

### Rule 1.5.4 Standards for Testing Pesticides

- 1. Usable marijuana required to be tested for pesticides shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 1.
- 2. The cannabis testing facility shall report whether any Residual Pesticides are detected above the limit of detection (LOD) and shall report the result of the testing in ppms on the Certificate of Analysis. The cannabis testing facility shall indicate "pass" or "fail" on the Certificate of Analysis.
- 3. A batch fails pesticide testing if a cannabis testing facility detects the presence of a pesticide above the action levels listed in Appendix A, Table 1 in a sample:
  - a. During an initial test where no reanalysis is requested; or
  - b. Upon reanalysis as described in Rule 1.6.7 of this Chapter.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# Rule 1.5.5 Standards for Testing Solvents

- 1. Usable marijuana required to be tested for solvents shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 2.
- 2. The cannabis testing facility shall report the result of the residual solvents testing in ppm on the Certificate of Analysis and indicate "pass" or "fail" on the Certificate of Analysis.

- 3. A batch fails solvent testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter:
  - a. Detects the presence of a solvent above the action level listed in Appendix A, Table 2; or
  - b. Calculates a RPD of more than 20 percent between the field primary result of the sample and the field duplicate result.

### Rule 1.5.6 Standards for Testing Water Activity and Moisture Content

- 1. Usable marijuana shall be tested by a currently Mississippi licensed and registered cannabis testing facility for:
  - a. Water activity; and
  - b. Moisture content.
- 2. If a sample has a water activity rate of more than 0.65 Aw the sample fails. The cannabis testing facility shall report the result of the water activity test on the COA and indicate "pass" or "fail" on the COA.
- 3. If a sample has a moisture content of more than 15 percent, the sample fails. The cannabis testing facility shall report the result of the moisture content on the COA and indicate "pass" or "fail" on the COA.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Rule 1.5.7 Standards for THC and CBD Testing

- 1. A Mississippi licensed and registered cannabis testing facility shall test for the following when testing usable marijuana for potency:
  - a. THC;
  - b. THCA;
  - c. CBD;
  - d. CBDA.
- 2. A cannabis testing facility shall establish a limit of quantitation of 1.0 mg/g or lower for all cannabinoids analyzed and reported.
- 3. A cannabis testing facility shall report the result of the cannabinoid testing on the Certificate of Analysis, including, at minimum:

- a. A percentage for THC, THCA, CBD, and CBDA. The dry-weight percent shall be calculated using the below equation: Dry-weight percent cannabinoid = wet-weight percent cannabinoid / (1 percent moisture / 100) (2);
- b. A percentage for Total THC and Total CBD, if applicable;
- c. Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for THC, THCA, CBD, and CBDA;
- d. Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for Total THC and Total CBD, if applicable;
- e. Total cannabinoid concentration shall be calculated for concentration expressed in weight: Total cannabinoid concentration (mg/g) = (cannabinoid acid form concentration (mg/g) x 0.877) + cannabinoid concentration (mg/g);
- f. Milligrams per package for THC and CBD;
- g. Milligrams per package for Total THC and Total CBD, if applicable;
- h. Milligrams per serving for THC and CBD, if any;
- i. Milligrams per serving for Total THC and Total CBD, if any and if applicable;
- j. The results of all other cannabinoids analyzed on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams per milliliter (mg/mL) if by volume.
- 5. The sample shall be deemed to have passed the cannabinoid testing if the amount of THC does not exceed the limits below:
  - a. Cannabis flower or trim potency  $\leq 30\%$  total THC.
  - b. Cannabis tinctures, oils or concentrates  $\leq 60\%$  total THC
- 6. A cannabis testing facility shall report the test results and indicate an overall "pass" or "fail" for the cannabinoid testing on the Certificate of Analysis.
- 7. A process lot of a cannabinoid concentrate, or extract fails potency testing if, based on an initial test where no reanalysis is requested or upon reanalysis, the amount of THC, as calculated pursuant to Rule 1.5.9 of this chapter, between samples taken from the batch exceeds 30 percent RSD.

#### Rule 1.5.8 Standards for Testing for Heavy Metals

- 1. Usable marijuana must be tested by a current Mississippi licensed and registered cannabis testing facility for the metals listed in Appendix A.
- 2. A cannabis testing facility shall report the result of the heavy metals test on the Certificate of Analysis and indicate "pass" or "fail" on the COA.
- 3. A batch fails metals testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter detects the presence of metals above the action level listed in Appendix A, Table 3.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

## Rule 1.5.9 Standards for Mycotoxin Testing

- 1. Usable marijuana shall be tested by a Mississippi licensed and registered cannabis testing facility for the following mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A listed
- 2. A batch shall be deemed to have passed mycotoxin testing if both the following conditions are met:
  - a. Total of aflatoxin B1, B2, G1, and G2 does not exceed 20  $\mu$ g/kg of substance, and
  - b. Ochratoxin A does not exceed 20 µg/kg of substance.
- 3. A cannabis testing facility shall report the result of the mycotoxin testing on the Certificate of Analysis and indicate "pass" or "fail" on the COA.
- 4. A batch fails mycotoxin testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter detects the presence of mycotoxins above the action level listed in Appendix A.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

### Rule 1.5.10 Standards for Terpenoid Testing

- 1. Usable marijuana shall be tested by a Mississippi licensed and registered cannabis testing facility to determine the terpenoid profile of the sample.
- A cannabis testing facility shall report the result of the terpenoid testing on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams per milliliter (mg/mL) if by volume.

## Rule 1.5.11 Standards for Foreign Material Testing

- 1. Usable marijuana shall be tested by a Mississippi licensed and registered cannabis testing facility to determine whether foreign material is present.
- 2. A cannabis testing facility shall report the result of the foreign material test by indicating "pass" or "fail" on the COA.
- 3. A cannabis testing facility shall perform foreign material testing on the total representative sample prior to sample homogenization.
- 4. When the licensed laboratory performs foreign material testing, at minimum, the laboratory shall do all of the following:
  - a. Examine both the exterior and interior of the dried flower sample, and:
  - b. Examine the exterior of the cannabis product sample.
- 5. The sample shall be deemed to have passed the foreign material testing if the presence of foreign material does not exceed:
  - a. 1/4 of the total sample area covered by sand, soil, cinders, or dirt;
  - b. 1/4 of the total sample area covered by mold;
  - c. 1 insect fragment, 1 hair, or 1 count mammalian excreta per 3.0 grams; or
  - d. 1/4 of the total sample area covered by an imbedded foreign material.
- 6. If the sample fails foreign material testing, the batch from which the sample was collected fails foreign material testing and shall not be released for retail sale.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 6: Failed Test Samples**

Rule 1.6.1 If a sample fails any initial test, the cannabis testing facility that did the testing may reanalyze the sample. If the sample passes, another cannabis testing facility must resample the batch and confirm that result in order for the batch to pass testing.

- Rule 1.6.2 If a sample fails a test or a reanalysis under Rule 1.6.1 of this Chapter, the batch:
  - 1. May be remediated or sterilized in accordance with this subchapter; or
  - 2. If it is not or cannot be remediated or sterilized under this rule, it must be destroyed in a manner specified by the Department.

Rule 1.6.3 If a medical cannabis establishment sells or transfers a batch that has failed a test, the medical cannabis establishment must notify the medical cannabis establishment to which the product is sold or transferred of the failed test within 24 hours of receipt of the COA.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.6.4 Failed microbiological contaminant testing.
  - 1. If a sample from a batch of usable marijuana fails microbiological contaminant testing, the batch may be used to make a cannabinoid concentrate or extract if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.
  - 2. If a sample from a batch of a cannabinoid concentrate or extract fails microbiological contaminant testing, the batch may be further processed, if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.
  - 3. A batch that is sterilized in accordance with subsection (1) or (2) of this rule must be sampled and tested in accordance with this Chapter and must be tested, if not otherwise required for that product, for microbiological contaminants, solvents and pesticides.
  - 4. A batch that fails microbiological contaminant testing after undergoing a sterilization process in accordance with subsection (1) or (2) of this rule must be destroyed in a manner specified by the Department.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

## Rule 1.6.5 Failed solvent testing.

- 1. If a sample from a batch fails solvent testing, the batch may be remediated using procedures that would reduce the concentration of solvents to less than the action level.
- 2. A batch that is remediated in accordance with subsection (1) of this rule must be sampled and tested in accordance with this Chapter and must be

- tested if not otherwise required for that product under this Chapter, for solvents and pesticides.
- 3. A batch that fails solvent testing that is not remediated or that if remediated fails testing must be destroyed in a manner specified by the Department.

- Rule 1.6.6 Failed water activity testing and moisture testing.
  - 1. If a sample from a batch of usable marijuana fails for water activity or moisture activity, the batch from which the sample was taken may:
    - a. Be used to make a cannabinoid concentrate or extract; or
    - b. Continue to dry or cure.
  - 2. A batch that undergoes additional drying or curing as described in subsection (1) of this rule must be sampled and tested in accordance with this Chapter.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.6.7 Failed pesticide testing.
  - 1. If a sample from a batch fails pesticide testing, the batch may not be remediated and must be destroyed in a manner approved by the Department and identified on the Department's website.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.6.8 Failed potency testing.
  - 1. Usable marijuana that fails potency testing under Rule 1.5.7 of this Chapter may be repackaged in a manner that enables the item to meet the standard in Rule 1.5.7 of this Chapter.
  - 2. Usable marijuana that is repackaged in accordance with this section must be sampled and tested in accordance with these rules.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Rule 1.6.9 Failed remediation

1. If a sample fails a test after undergoing remediation or sterilization as permitted under this rule, the batch must be destroyed in a manner approved by the Department.

- 2. A cultivation facility or processing facility must inform a cannabis testing facility prior to samples being taken that the batch has failed a test and is being retested after undergoing remediation or sterilization.
- 3. A cultivation facility or processing facility must, as applicable:
  - a. Have detailed procedures for sterilization processes to remove microbiological contaminants and for reducing the concentration of solvents.
  - b. Document all sampling, testing, sterilization, remediation and destruction that are a result of failing a test under these rules.
- 4. A cannabis or cannabis product batch may only be remediated twice. If the batch fails after a second remediation attempt and the second retesting, the entire batch shall be destroyed in a manner approved by the Department.
- 5. Within one business day of completing the required analyses of a representative sample obtained from a remediated cannabis or cannabis product batch, the cannabis testing facility shall upload the COA information into the seed-to-sale system.

### **Subchapter 7: Tentative Identification of Compounds**

- Rule 1.7.1 Tentatively Identified Compounds (TICs) are compounds detected in a sample using gas chromatography mass spectrometry that are not among the target analytes for the residual solvent analysis.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.7.2 The Department may initiate an investigation of a cultivation facility or processing facility upon receipt of a TICs report from a cannabis testing facility and may require a cultivation facility or processing facility to submit samples for additional testing, including testing for analytes that are not required by these rules, at the cultivation facility or processing facility's expense.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# **Subchapter 8: Certificate of Analysis ("COA")**

- Rule 1.8.1 The cannabis testing facility shall generate a Certificate of Analysis for each representative sample that the cannabis testing facility analyzes.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.8.2 The cannabis testing facility shall ensure that the COA contains the results of all required analyses performed for the representative sample.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.3 The cannabis testing facility shall, within 1 business day of completing all analyses of a sample, upload the COA into the seed-to-sale system.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.4 The cannabis testing facility shall not release to any person any cumulative or individual test results prior to completing all analyses and providing the COA to the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.5 The COA shall contain, at minimum, the following information:
  - 1. The term "Regulatory Compliance Testing" in font no smaller than 14-point, which shall appear in the upper-right corner of each page of the COA. No text or images shall appear above the term "Regulatory Compliance Testing" on any page of the COA.
  - 2. The cannabis testing facility's name, premises address, and license number; dispensary's authorized to engage in distribution's name, premises address, and license number; cultivator's, or processor's name, premises address, and license number;
  - 3. Batch number of the batch from which the sample was obtained. For cannabis and cannabis products that are already packaged at the time of sampling, the labeled batch number on the packaged cannabis and cannabis products shall match the batch number on the COA;
  - 4. Sample identifying information, including matrix type and unique sample identifiers:
  - 5. Sample history, including the date collected, the date received by the cannabis testing facility, and the date(s) of sample analyses and corresponding testing results;
  - 6. A picture of the sample of cannabis and cannabis products. If the sample is pre-packaged, the picture must include an unobstructed image of the packaging;
  - 7. For dried flower samples, the total weight of the batch, in grams or pounds, and the total weight, of the representative sample in grams;
  - 8. For cannabis product or pre-rolls samples, the total unit count of both the representative sample and the total batch size;

- a. Measured density of the cannabis and cannabis products;
- 9. The analytical methods, analytical instrumentation used, and corresponding Limits of Detection ("LOD)" and Limits of Quantitation ("LOQ");
- 10. An attestation on the COA from the cannabis testing facility supervisory or management employee that all LQC samples required by this Chapter were performed and met the acceptance criteria; and
- 11. Analytes detected during the analyses of the sample that are unknown, unidentified, or injurious to human health if consumed, if any.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.6 The cannabis testing facility shall report test results for each representative sample on the COA as follows: Indicate an overall "pass" or "fail" for the entire batch;
  - 1. When reporting qualitative results for each analyte, the cannabis testing facility shall indicate "pass" or "fail";
  - 2. When reporting quantitative results for each analyte, the cannabis testing facility shall use the appropriate units of measurement as required under this chapter;
  - 3. When reporting results for each test method, the cannabis testing facility shall indicate "pass" or "fail";
  - 4. When reporting results for any analytes that were detected below the analytical method LOQ, indicate "<LOQ", notwithstanding cannabinoid results;
  - 5. When reporting results for any analytes that were not detected or detected below the LOD, indicate "ND"; and
  - 6. Indicate "NT" for any test that the cannabis testing facility did not perform.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.7 The cannabis testing facility supervisory or management employee shall validate the accuracy of the information contained on the COA and sign and date the COA.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.8 The cannabis testing facility supervisory or management employee may request to amend a COA to correct minor errors and upload into the seed to sale system.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# **Subchapter 9: Post Testing Sample Requirements**

- Rule 1.9.1 The cannabis testing facility shall retain the reserve sample, consisting of any portion of a sample that was not used in the testing process. The reserve sample shall be kept at minimum, for 45 business days after the analyses, after which time it may be destroyed and denatured to the point the material is rendered unrecognizable and unusable.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.9.2 The cannabis testing facility shall securely store the reserve sample in a manner that prohibits sample degradation, contamination, and tampering.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.9.3 The cannabis testing facility shall provide the reserve sample to the Department upon request.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

### **Subchapter 10: Transportation of Samples**

- Rule 1.10.1 Employees/agents of the cannabis testing facility are responsible for the collection and transportation of testing samples.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.2 Employees/agents of the cannabis testing facility must utilize an electronic inventory management system to create and maintain transportation manifests documenting all transport of medical marijuana and medical marijuana products throughout the State of Mississippi.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.3 When transporting medical cannabis or medical cannabis products, all cannabis testing facilities and their employees/agents shall provide copies of the inventory manifests to each originating and receiving medical cannabis establishment at the time the product changes possession.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.10.4 The copy of the inventory manifest to be left with the originating medical cannabis establishment shall include, at a minimum:
  - a. The license number, business name, address, and contact information of the originating medical cannabis establishment;
  - b. A complete inventory of the medical cannabis and medical cannabis products to be transported, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);
  - c. The date of transportation and the approximate time of departure;
  - d. Printed names, signatures, and identification card numbers of personnel accompanying the transport;
  - e. The license number(s), business name(s), address(es), and contact information for all end point recipients.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.5 The copy of the inventory manifest to be left with the receiving medical cannabis establishment shall include, at a minimum:
  - a. The license number, business name, address, and contact information for the receiving medical cannabis establishment;
  - b. The license number, business name, address, and contact information of the originating medical cannabis establishment;
  - c. A complete inventory of the medical cannabis and medical cannabis products delivered to the receiving medical cannabis establishment, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);
  - d. The date and estimated time of arrival;
  - e. The printed names, signatures, and identification card numbers of the personnel accompanying the transport; and
  - f. The printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving medical cannabis establishment.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.6 Transportation manifests should reflect a complete chain of custody of all medical cannabis and medical cannabis products being transported, including all instances in which the medical cannabis and medical cannabis products are stored.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.7 Originating and receiving licensed entities shall maintain copies of transportation manifests and inventory records logging the quantity of medical cannabis or medical cannabis products received for at least three (3) years from the date of receipt.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.8 A transportation manifest must not be altered after departing from the originating medical cannabis establishment's premises, except for the addition of the printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving cannabis testing facility.

# **Subchapter 11: Cannabis Testing Facility Quality Assurance**

- Rule 1.11.1 The cannabis testing facility shall develop and implement a Quality Assurance (QA) program to assure the reliability and validity of the analytical data produced by the cannabis testing facility. The QA program shall, at minimum, include a written QA manual that addresses the following:
  - 1. Quality control procedures;
  - 2. Cannabis testing facility organization and employee training and responsibilities, including good laboratory practice (GLP);
  - 3. QA objectives for measurement data;
  - 4. Traceability of data and analytical results;
  - 5. Instrument maintenance, calibration procedures, and frequency;
  - 6. Performance and system audits,;
  - 7. Corrective action procedures;
  - 8. Steps to change processes when necessary;
  - 9. Record retention and document control;
  - 10. Test procedure standardization; and
  - 11. Method validation:
  - 12. Chain of custody protocols;
  - 13. Premise and sample security;
  - 14. Sample handling, including sample receipt, identification, rejection, storage and destruction;
  - 15. Contingency plans for data that is not within control limits, or is otherwise unacceptable for analysis; and
  - 16. Disposal of marijuana and laboratory waste.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.11.2 The supervisory or management cannabis testing facility employee shall annually review, amend if necessary, and approve the QA program and manual both when they are created and when there is a change in methods, testing facility equipment, or the supervisory or management testing facility employee.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.11.3 The cannabis testing facilities standard operating procedures for testing methods shall include the following:
  - 1. The name of the testing method;
  - 2. A list of all analytes used in the testing method;
  - 3. The applicable matrix or matrices;
  - 4. Sample receipt and acceptance;
  - 5. Method sensitivity;
  - 6. Potential interferences;
  - 7. Analytical instrument and equipment used;
  - 8. Consumable supplies, reagents, and standards;
  - 9. Sample preservation and hold time;
  - 10. Type, frequency, and acceptable criteria for quality control samples;
  - 11. Type, frequency, and acceptable criteria for calibration standards;
  - 12. Procedures for analyzing batch samples;
  - 13. Data quality assessment and acceptance criteria;
  - 14. Calibration of results; and
  - 15. Reagent solution and reference material preparation.

#### **Subchapter 12: Cannabis Testing Facility Quality Control Samples**

Rule 1.12.1 The cannabis testing facility shall use Quality Control samples (QC) and adhere to good, approved laboratory practice ("GLP") in the performance of each analysis according to the specifications of this Chapter.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.2 The cannabis testing facility shall analyze QC samples in the same manner as the cannabis testing facility analyzes cannabis and cannabis products samples.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.3 The cannabis testing facility shall use at least one negative control, one positive control, and one cannabis testing facility replicate sample in each analytical batch for each target organism during microbial testing. If one of the controls produces unexpected results, the samples shall be re- prepped and reanalyzed with a new set of controls.

Rule 1.12.4 If the result of the microbial analyses is outside the specified acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

<b>Testing facility</b>	Acceptance	Corrective Action
Quality	Criteria	
Control		
Sample		
Positive control	Produces expected result, positive result	Re-prep and reanalyze the entire analytical batch, once. If problem persists, locate and remedy the source of unexpected result, then re-prep samples and reanalyze with a
		new set of controls.
Negative control	Produces expected result, negative result	Re-prep and reanalyze the entire analytical batch, once. If problem persists, locate and remedy the source of unexpected result, then re-prep samples and reanalyze with a new set of controls.
laboratory replicate sample	Sample results must concur	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.

- Rule 1.12.5 The cannabis testing facility shall prepare and analyze at least one of each of the following QC samples for each analytical batch:
  - 1. Method Blank;
  - 2. Laboratory control sample (LCS); and
  - 3. Duplicate laboratory control sample; and
  - 4. Matrix spike sample; and
  - 5. Duplicate matrix spike sample

Rule 1.12.6 The cannabis testing facility shall analyze, at minimum, a continuing calibration verification ("CCV") sample at the beginning of each analytical sequence and every 10 samples thereafter.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Rule 1.12.7 If the result of the chemical analyses is outside the specified acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Quality Control Sample	Acceptance Criteria	Corrective Action
Method Blank sample	Not to exceed LOQ	Reanalyze entire analytical batch once. If method blank is still greater than the LOQ for any analyte, locate the source of contamination then re-prep samples and reanalyze.
Laboratory Control Sample	Percent recovery 70% to 130%	Reanalyze the entire analytical batch, once. If problem persists, re-prep samples and reanalyze or re-run the initial calibration curve.
Duplicate Laboratory Control Sample	RPD ≤30%	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
Matrix spike sample	Percent recovery between 70% to 130%	Reanalyze sample and associated matrix spike sample once. If problem persists, re-prep samples and reanalyze.

Duplicate Matrix Spike Sample	RPD ≤30%	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
CCV	Percent recovery between 70% to 130%	Reanalyze all samples that followed the last CCV that met the acceptance criteria. If CCV still fails, re-run the initial calibration curve and all samples in the analytical sequence.

Rule 1.12.8 A cannabis testing facility shall use the following calculation for determining Relative Percentage Difference (RPD):

$$RPD = \frac{\text{(sample result - duplicate result)}}{\text{(sample result - duplicate result)/2}}$$

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Rule 1.12.9 A cannabis testing facility shall use the following calculation for determining Relative Standard Deviation (RSD):

$$\%RSD = \frac{s}{x} \times 100\%$$

$$s = \sqrt{\sum_{i=0}^{n} \frac{(x_i - \tilde{x})^2}{(n-1)}}$$

For purposes of this rule:

s = standard deviation.

n = total number of values.

 $x_i$  = each individual value used to calculate mean.

x = mean of n values.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Rule 1.12.10 For calculating both RPD and RSD if any results are less than the LOQ, the absolute value of the LOQ is used in the equation.

- Rule 1.12.11 If any analyte is detected above any action level, as described in this chapter, the sample shall be re-prepped and reanalyzed in replicate within another analytical batch.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.12 For quantitative analyses, the re-prepped sample and its associated replicate shall meet the acceptance criteria of RPD ≤30%.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.13 For qualitative analyses, the re-prepped sample and its associated replicate results must concur.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.14 If any quality control sample produces a result outside of the acceptance criteria, the cannabis testing facility cannot report the result and the entire batch cannot be released for retail sale. The cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.15 If the cannabis testing facility determines that the result is a false-positive or a false-negative, the Department may ask for the cannabis testing facility to resample or re-test.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.16 The cannabis testing facility shall compile and generate one LQC sample report for each analytical batch that includes LQC acceptance criteria, measurements, analysis date, and matrix.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Subchapter 13: Limits of Detection (LOD) and Limits of Quantitation (LOQ) for Quantitative Analyses
- Rule 1.13.1 The cannabis testing facility shall calculate the LOD for chemical method analyses according to any of the following methods:

- 1. Signal-to-noise ratio of between 3:1 and 2:1;
- 2. Standard deviation of the response and the slope of calibration curve using a minimum of 7 spiked blank samples calculated as follows;
  - LOD = (3.3 x standard deviation of the response) / slope of the calibration curve; or
- 3. A method published by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA).
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.13.2 The cannabis testing facility shall calculate the LOQ for chemical method analyses according to any of the following methods:
  - 1. Signal-to-noise ratio of 10:1, at minimum;
  - 2. Standard deviation of the response and the slope using a minimum of 7 spiked Blank samples calculated as follows:
    - $LOQ = (10 \times standard\ deviation\ of\ the\ response) / slope\ of\ the\ calibration\ curve;$  or
  - 3. A method published by the USFDA or the USEPA.

### **Subchapter 14: Cannabis Testing Facility Data Package**

- Rule 1.14.1 The cannabis testing facility shall compile and generate one data package for each representative sample that the cannabis testing facility analyzes.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.14.2 The cannabis testing facility shall create a data package and provide to the Department immediately upon request.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

### **Subchapter 15: Required Proficiency Testing**

- Rule 1.15.1 The cannabis testing facility shall participate in a proficiency testing program provided by an organization that operates in conformance with the requirements of ISO/IEC 17043, at least once every six months.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.2 The cannabis testing facility shall annually, successfully participate in a proficiency testing program for each of the following test methods:
  - 1. Cannabinoids;
  - 2. Heavy metals;
  - 3. Microbial impurities;
  - 4. Mycotoxins;
  - 5. Residual pesticides;
  - 6. Residual solvents and processing chemicals;
  - 7. Terpenoids; and,
  - 8. Foreign Material
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.3 The cannabis testing facility shall report all analytes available by the proficiency testing program provider and for which the licensee is required to test as required under this chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.4 The cannabis testing facility shall participate in the proficiency testing program by following the cannabis testing facility's existing SOPs for testing cannabis and cannabis products.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.5 The cannabis testing facility shall rotate the proficiency testing program among the cannabis testing facility employees who perform the test methods.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.6 Cannabis testing facility employees who participate in a proficiency testing program shall sign the corresponding analytical reports or attestation statements to certify that the proficiency testing program was conducted in the same manner as the cannabis testing facility tests of cannabis and cannabis products.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.7 A supervisory or management cannabis testing facility employee shall review and verify the accuracy of results reported for all proficiency testing program samples analyzed.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.8 The cannabis testing facility shall request the proficiency testing program provider to send results concurrently to the Department, if available, or the cannabis testing facility shall provide the proficiency testing program results to the Department within 3 business days after the cannabis testing facility receives notification of their test results from the proficiency testing program provider.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 16: Proficiency Testing Performance**

- Rule 1.16.1 The cannabis testing facility shall be deemed to have successfully participated in a proficiency testing program for an analyte tested in a specific method if the test results demonstrate a "satisfactory" or otherwise proficient performance determination by the proficiency testing program provider.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.16.2 The cannabis testing facility may not report test results for analytes that are deemed by the proficiency testing program provider as "unacceptable," "questionable," "unsatisfactory", or otherwise deficient.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.16.3 The cannabis testing facility may resume reporting test results for analytes that were deemed "unacceptable," "questionable," "unsatisfactory", or otherwise deficient, only if both of the following conditions are met:
  - 1. The cannabis testing facility satisfactorily remedies the cause of the failure for each analyte; and
  - 2. The cannabis testing facility submits, to the Department, a written corrective action report demonstrating how the cannabis testing facility has fixed the cause of the failure.

#### **Subchapter 17: Cannabis Testing Facility Audits**

- Rule 1.17.1 The cannabis testing facility shall conduct an internal audit at least once per year or in accordance with the ISO/IEC 17025 accrediting body's requirement, whichever is more frequent.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.17.2 The internal audit shall include all the components required by the ISO/IEC 17025 internal-audit standards.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.17.3 Within three (3) business days of completing the internal audit, the cannabis testing facility shall submit the results of the internal audit to the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.17.4 A cannabis testing facility shall contract with an independent, third-party auditor certified to conduct on-site audits at least annually or in accordance with ISO/IEC 17025 accrediting body's requirements standards.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.17.5 Within three (3) business days of receiving the accrediting body on-site audit findings, the cannabis testing facility shall submit the report to the Department.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.17.6 The Department reserves the rights to perform additional audits as needed and without advance notice.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 18: Cannabis Testing Facility Employee Qualifications**

- Rule 1.18.1 The cannabis testing facility may only employ persons who are at least 21 years of age and possess a current Department issued Medical Cannabis Establishment Agent Work Permit.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.18.2 Medical Cannabis Establishment agents of all cannabis testing facilities shall apply for and receive a valid Medical Cannabis Establishment Agent Work Permit from the Department before beginning employment with any cannabis testing facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.18.3 Work permits are not transferable to other employees or individuals.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.18.4 Medical Cannabis Establishment agents shall be required to display current work permits issued by the Department on their person in plain view while at the cannabis testing facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.18.5 The cannabis testing facility shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned functions.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.18.6 The cannabis testing facility shall ensure and document that each cannabis testing facility employee meets the employee qualifications.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# Subchapter 19: Denial of Application for or Renewal of a Cannabis Testing Facility License or Registration

- Rule 1.19.1 The Department may deny an application for or renewal of a license or registration for any of the following reasons:
  - 1. Failure to provide the information required in this Chapter;
  - 2. Failure to meet the requirements set forth in this Chapter;
  - 3. Provision of misleading, incorrect, false or fraudulent information;
  - 4. Failure to pay all applicable fees as required;
  - 5. Any other ground that serves the purposes of this Chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.19.2 If the Department denies an application for or renewal of a license or registration, the Department shall notify the applicant in writing of the Department's decision, including the reason for denial.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.19.3 Denial of an application or renewal is considered a final Department action, is subject to judicial review as provided in Section 31 of the Mississippi Medical Cannabis Act.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 20: Fines, Suspensions and Revocations**

Rule 1.20.1 The Department may fine, suspend or revoke the license or registration of a cannabis testing for a violation of this Chapter or any rules and regulations under this Chapter by the cannabis testing facility or any of its employees or agents.

Rule 1.20.2 If a cannabis testing facility wishes to appeal the Department's decision, the cannabis testing facility shall file its administrative appeal in writing to the Department within twenty (20) days of receipt of the initial notice. If a cannabis testing facility fails to appeal the initial notice within twenty (20) days, the Departments decision becomes final. Any person or entity aggrieved by a final decision of the Department under the provisions of this Chapter may petition for judicial review of the decision or order as provided in Section 31 of the Mississippi Medical Cannabis Act.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Rule 1.20.3 A cannabis testing facility may continue to possess cannabis under its license during a suspension but shall not receive, transfer or test cannabis during the suspension period.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# Appendix A

Key to this Appendix:

- CAS Number = Chemical Abstract Services Registry number
- CFU = Colony-forming unit, a method to estimate the number of viable bacteria or fungal cells in a sample.

A. Microbial Contaminants			
Analyte	Maximum Allowable Contaminants	Required Action	
Escherichia coli	100 CFU/g	Remediate and retest, or Destroy	
Salmonella spp.	Detectable in 1 gram	Destroy	
Aspergillus flavus, Aspergillus fumigatus, Aspergillus niger, and Aspergillus terreus	Inhalable: Detectable in 1 gram	Remediate and retest, Remediate and use for preparing an extract or a concentrate, or destroy	

Mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A	Marijuana product, exce product intended for topi prepared from an extract of medical mariju B. Heavy M	Destroy	
Analyte	Maximum Allowable (		Required Action
Arsenic Cadmium Lead Mercury	0.4 ppm 0.4 ppm 1.0 ppm 1.2 ppm		Remediate and retest, or Destroy
	C. Residual S	Solvents	
Analyte	CAS Number	Maximum Allowable Concentration	Required Action
Acetone	67-64-1	1,000 ppm	
Acetonitrile	75-05-8	410 ppm	
Benzene	71-43-2	2 ppm	
Butanes (measured as the cumulative residue of n- butane and iso- butane)	106-97-8 and 75-28-5, respectively	5,000 ppm	
Chloroform	67-66-3	60 ppm	
Dichloromethane	75-09-2	600 ppm	
Ethanol	64-17-5	5,000 ppm	Remediate and retest,
Ethyl Acetate	141-78-6	5,000 ppm	or Destroy
Ethyl Ether	60-29-7	5,000 ppm	
Heptane	142-82-5	5,000 ppm	
Hexanes (measured as the cumulative residue of n-hexane, 2-	110-54-3, 107-83-5, and 79-29-8	290 ppm	

methylpentane, 3- methylpentane, 2,2- dimethylbutane, and 2,3- dimethylbutane) Isopropyl Acetate	108-21-4	5,000 ppm	
Methanol	67-56-1	3,000 ppm	
Pentanes (measured as the cumulative residue of n-pentane, iso- pentane, and neo- pentane)	109-66-0, 78-78-4, and 463-82-1	5,000 ppm	
2-Propanol (IPA)	67-63-0	5,000 ppm	
Propane	74-98-6	5,000 ppm	
Toluene	108-88-3	890 ppm	Remediate and retest,
Xylenes (measured as the cumulative residue of 1,2-dimethylbenzene, 1,3-dimethylbenzene, and 1,4-dimethylbenzene, and the non-xylene, ethylbenzene) dimethylbenzene, and 1,4-dimethylbenzene, and 1,4-dimethylbenzene, and the non-xylene, ethylbenzene, and the non-xylene, ethylbenzene)	1330-20-7 (95-47-6,108- 38-3, and 106-42- 3, and 100-41-4)	2,170 ppm	or Destroy
D. Pesticides, Fungicides, Growth Regulators			
Analyte	CAS Number	Maximum Allowable Concentration	Required Action
Abamectin	71751-41-2	0.5 ppm	
Acephate	30560-19-1	0.4 ppm	Destroy
Acequinocyl	57960-19-7	2.0 ppm	
Acetamiprid	135410-20-7	0.2 ppm	

Aldicarb	116-06-3	0.4 ppm
Azoxystrobin	131860-33-8	0.2 ppm
Bifenazate	149877-41-8	0.2 ppm
Bifenthrin	82657-04-3	0.2 ppm
Boscalid	188425-85-6	0.4 ppm
Carbaryl	63-25-2	0.2 ppm
Carbofuran	1563-66-2	0.2 ppm
Chlorantraniliprole	500008-45-7	0.2 ppm
Chlorfenapyr	122453-73-0	1.0 ppm
Chlormequat chloride	7003-89-6	0.2 ppm
Chlorpyrifos	2921-88-2	0.2 ppm
Clofentezine	74115-24-5	0.2 ppm
Cyfluthrin	68359-37-5	1.0 ppm
Cypermethrin	52315-07-8	1.0 ppm
Daminozide	1596-84-5	1.0 ppm
DDVP (Dichlorvos)	62-73-7	0.1 ppm
Diazinon	333-41-5	0.2 ppm
Dimethoate	60-51-5	0.2 ppm
Ethoprophos	13194-48-4	0.2 ppm
Etofenprox	80844-07-1	0.4 ppm
Etoxazole	153233-91-1	0.2 ppm
Fenoxycarb	72490-01-8	0.2 ppm
Fenpyroximate	134098-61-6	0.4 ppm
Fipronil	120068-37-3	0.4 ppm
Flonicamid	158062-67-0	1.0 ppm
Fludioxonil	131341-86-1	0.4 ppm
Hexythiazox	78587-05-0	1.0 ppm
Imazalil	35554-44-0	0.2 ppm
Imidacloprid	138261-41-3	0.4 ppm
Kresoxim-methyl	143390-89-0	0.4 ppm
Malathion	121-75-5	0.2 ppm
Metalaxyl	57837-19-1	0.2 ppm
Methiocarb	2032-65-7	0.2 ppm
Methomyl	16752-77-5	0.4 ppm
Methyl parathion	298 -00 - 0	0.2 ppm
Myclobutanil	88671-89-0	0.2 ppm
Naled	300-76-5	0.5 ppm
Oxamyl	23135-22-0	1.0 ppm
Paclobutrazol	76738-62-0	0.4 ppm

Permethrins (measured as the cumulative residue of cis- and trans- isomers)	52645-53-1(54774- 45-7 and 51877-74-8)	0.2 ppm	
Phosmet	732-11-6	0.2 ppm	
Piperonyl_butoxide	51-03-6	2.0 ppm	
Prallethrin	23031-36-9	0.2 ppm	
Propiconazole	60207-90-1	0.4 ppm	
Propoxur	114-26-1	0.2 ppm	
Pyrethrins (measured as the cumulative residue of pyrethrin 1, cinerin 1 and jasmolin 1)	8003-34-7(121-21-1, 25402- 06-6, and 4466-14- 2)	1.0 ppm	
Pyridaben	96489-71-3	0.2 ppm	
Spinosad	168316-95-8	0.2 ppm	
Spiromesifen	283594-90-1	0.2 ppm	
Spirotetramat	203313-25-1	0.2 ppm	
Spiroxamine	118134-30-8	0.4 ppm	
Tebuconazole	107534-96-3	0.4 ppm	
Thiacloprid	111988-49-9	0.2 ppm	
Thiamethoxam	153719-23-4	0.2 ppm	
Trifloxystrobin	141517-21-7	0.2 ppm	

# E. Potency

Analyte	Labelling	Required Action
Tetrahydrocan nabinolic acid (THC-A) Delta-9- tetrahydrocann abinol (Δ9- THC)	Label claim is not within +/- 20 % of tested value	Revise label as necessary
Cannabidiolic acid (CBD-A) Cannabidiol (CBD)	varue	
Terpenoids (primary and secondary)	Label claim is not within +/- 10 % of tested value	Destroy

F. Moisture Content and Water Activity Testing		
Measurement	Allowable Measurement	Required Action
Water activity	> 0.65 Aw	Destroy
Moisture content	> than 15%	Remediate and retest

Title 15: Mississippi State Department of Health

Part 22: Medical Cannabis Program

**Subpart 1: Cannabis Testing Facilities** 

#### **Chapter 1 REGULATIONS FOR CANNABIS TESTING FACILITY**

#### **Subchapter 1 General Provisions:**

Rule 1.1.1. Legal Authority: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Rule 1.1.2 Definitions.**

- 29. "Accreditation" means being currently deemed as technically competent under ISO/IEC 17025:2017 by any of the following accrediting organizations:
  - a. <u>American Association of Approved laboratory Accreditation</u>,
  - b. <u>Perry Johnson Approved laboratory Accreditation</u>,
  - c. <u>American National Standards Institute (ANSI) National Accreditation Board, or</u>
  - d. International Accreditation Services.
- 30. "Accreditation body" means an impartial organization that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement for Testing, and which requires laboratories to conform to ISO/IEC 17025, the general requirements for the competence

- of laboratories established by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).
- 31. "Analytical Batch" means a set of no more than twenty samples that are prepared together for the same type of analysis, are sequentially analyzed using the same instrument calibration curve, and have common analytical quality control requirements. The batch shall include testing samples as well as all applicable quality control samples, to include one method blank, duplicate laboratory fortified blanks, and duplicate matrix spikes, as required by the analytical method.
- 32. "Cannabis" means all parts of the plant of the genus cannabis, the flower, the seeds thereof, the resin extracted from any part of the plant and every compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or its resin, including whole plant extracts. Such term shall not mean cannabis-derived drug products approved by the federal Food and Drug Administration under Section 505 of the Federal Food, Drug, and Cosmetic Act.
- 33. "Cannabis products" means cannabis flower, concentrated cannabis, cannabis extracts and products that are infused with cannabis or an extract thereof and are intended for use or consumption by humans. The term includes, without limitation, edible cannabis products, beverages, topical products, ointments, oils, tinctures and suppositories that contain tetrahydrocannabinol (THC) and/or cannabidiol (CBD) except those products excluded from control under Sections 41-29-113 and 41-29-136, Mississippi Code of 1972, as amended.
- 34. "Cannabis testing facility" or "testing facility" means an independent entity licensed and registered by the Mississippi Department of Health that analyzes the safety and potency of cannabis.
- 35. "Concentrate" means a substance obtained by separating cannabinoids from cannabis by any of the following methods:
  - a. A mechanical extraction process;
  - b. A chemical extraction process using a nonhydrocarbon-based or other solvent, such as water, vegetable glycerin, vegetable oils, animal fats, food-grade ethanol or steam distillation; or
  - c. A chemical extraction process using the hydrocarbon-based solvent carbon dioxide, provided that the process does not involve the use of high heat or pressure.
- 36. "Department" means the Mississippi State Department of Health
- 37. "Disqualifying felony offense" means:

- a. A conviction for a crime of violence, as defined in Section 97-3-2; 335, Mississippi Code of 1972, as amended
- b. A conviction for a crime that was defined as a violent crime in the law of the jurisdiction in which the offense was committed, and that was classified as a felony in the jurisdiction where the person was convicted; or
- c. A conviction for a violation of a state or federal controlled substances law that was classified as a felony in the jurisdiction where the person was convicted, including the service of any term of probation, incarceration or supervised release within the previous five (5) years and the offender has not committed another similar offense since the conviction. Under this subparagraph (iii), a disqualifying felony offense shall not include a conviction that consisted of conduct for which this chapter would likely have prevented the conviction but for the fact that the conduct occurred before the effective date of this act.
- 38. "Edible cannabis products" means products that:
  - a. Contain or are infused with cannabis or an extract thereof;
  - b. Are intended for human consumption by oral ingestion; and
  - c. <u>Are presented in the form of foodstuffs, beverages, extracts, oils, tinctures, lozenges and other similar products.</u>
- 39. "Laboratory Control Sample" (LCS) means a blank matrix to which known concentrations of each of the target method analytes are added. The spiked concentration must be at a mid-range concentration of the calibration curve for the target analytes. The LCS is analyzed in the same manner as the representative sample.
- 40. "Laboratory replicate sample" means a sub-sample taken of the representative sample used for laboratory quality control purposes to demonstrate reproducibility. It is prepared and analyzed in the identical manner as the representative sample. The results from replicate analyses are used to evaluate analytical precision.
- 41. "Limit of detection" (LOD) means the lowest quantity of a substance or analyte that can be distinguished from the absence of that substance within a stated confidence limit.
- 42. "Limit of quantitation" (LOQ) means the minimum concentration of an analyte in a specific matrix that can be reliably quantified while also meeting predefined goals for bias and imprecision.
- 43. "Linear regression" means the determination, in analytical chemistry, of the best linear equation for calibration data to generate a calibration curve. The concentrate of an analyte in a sample can then be determined by

- comparing a measurement of the unknown to the calibration curve. A linear regression uses the following equation: y = mx + b; where m = slope, b = intercept.
- 44. "Matrix" means the substances that are present in a sample except for the analyte(s) of interest.
- 45. "Matrix spike sample" means a sample prepared by adding a known quantity of each of the target analyte to a sample matrix or to a matrix that is as closely representative of the matrix being analyzed as possible. The spiked concentration must be at a mid-range concentration of the calibration curve for the target analytes.
- 46. "Medical cannabis establishment" means a cannabis cultivation facility, cannabis processing facility, cannabis testing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility licensed and registered by the appropriate agency.
- 47. "Medical cannabis establishment agent" means an owner, officer, board member, employee, volunteer or agent of a medical cannabis establishment.
- 48. <u>"Method Blank" means an analyte free matrix to which all reagents are added in the same volumes or proportions as used in the sample preparation and is processed in exactly the same manner as the samples.</u>
- 49. "Moisture content" means the percentage of water in a sample, by weight.
- 50. "Percent recovery" means the percentage of a measured concentration relative to the added (spiked) concentration in a reference material or matrix spike sample. A laboratory shall calculate the percent recovery by dividing the sample result by the expected result then multiplying the quotient by 100.
- 51. "Practitioner" means a physician, certified nurse practitioner, physician assistant or optometrist who is licensed to prescribe medicine under the licensing requirements of their respective occupational boards and the laws of this state.
- 52. "Principal Officer" means persons who have ultimate responsibility for implementing the decisions of the cannabis testing facility and, include but are not limited to, the Chief Executive Officer, Chief Administrative Officer, Chief Financial Officer as applicable.
- 53. "School" means an institution for the teaching of children, consisting of a physical location, whether owned or leased, including instructional staff members and students, and which is in session each school year. This definition shall include, but not be limited to, public, private, church and parochial programs for kindergarten, elementary, junior high and high schools. Such term shall not mean a home instruction program.

- 54. <u>"Seed-to-Sale System" means the specialized inventory management system utilized throughout the medical cannabis program that allows for the tracking of cannabis from early life cycle until final sale.</u>
- 55. "THC" or "Tetrahydrocannabinol" means any and all forms of tetrahydrocannabinol that are contained naturally in the cannabis plant, as well as synthesized forms of THC and derived variations, derivatives, isomers and allotropes that have similar molecular and physiological characteristics of tetrahydrocannabinol, including, but not limited to, THCA, THC Delta 9, THC Delta 8, THC Delta 10 and THC Delta 6.
- 56. "Usable Marijuana" means any marijuana product intended for sale or distribution and intended for use or consumption by qualifying patients as defined in the Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022.
- <u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)</u>
- Rule 1.1.3 All cannabis testing facility laboratory operations must be physically located within the State of Mississippi.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.4 All cannabis testing facilities must be currently licensed and registered by the Department and adhere to all regulations set forth by the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.5

  No cannabis testing facilities shall be within one thousand (1,000) feet of the nearest property boundary line of a school, church or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facilities' application unless the cannabis testing facility has received approval from the school, church or child care facility and received a waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.6 A cannabis testing facility may be located in any area in a municipality or county that is zoned as commercial or for which commercial use is otherwise authorized or not prohibited.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.7 A cannabis testing facility shall not employ an agent or employee who also is employed or has ownership at any other medical cannabis establishment.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.8 To be licensed and registered by the Department, Cannabis testing facilities must be accredited as defined in this Chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.9 To be licensed and registered by the Department, Cannabis testing facilities must be accredited for testing at least one analyte required by the Department
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.10 Cannabis testing facilities shall test for cannabis-related analytes for which they have ISO/IEC 17025:2017 accreditation and Department registration.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.11 Cannabis testing facilities shall only employ persons who are at least 21 years of age and possess a current work permit issued by the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.12 Cannabis testing facilities shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned function.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.13

  Cannabis testing facilities shall conduct a fingerprint-based background check of the Mississippi Central Criminal Database and the Federal Bureau of Investigation Criminal History Database on every person seeking to become a principal officer, board member, agent, volunteer, or employee before the person begins working at the Cannabis testing facility.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.14 Cannabis testing facilities shall not employ a medical cannabis establishment agent, as defined in this Chapter, who has been convicted of a disqualifying felony offense.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.15 Cannabis testing facilities shall ensure, document, and provide to the Department upon request, documentation that each medical cannabis establishment agent, as defined by this Chapter, meets the requirements of the Mississippi Medical Cannabis Act, and Department regulations.
- <u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)</u>
- Rule 1.1.16 Cannabis testing facilities shall employ a full-time supervisor or management employee who must be responsible for the following:
  - 1. Overseeing and directing the scientific methods of the cannabis testing facility;
  - 2. Ensuring that the cannabis testing facility achieves and maintains a cannabis testing facility quality assurance program; and
  - 3. Providing ongoing and appropriate training to cannabis testing facility employees.
  - 4. To be considered qualified, the supervisor or management employee must have at minimum:
    - a. A doctoral degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university;
    - b. A master's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 2 years of full-time practical experience;
    - c. A bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 4 years of full-time practical experience; or
    - d. A bachelor's degree in any field from an accredited college or university, plus at least 8 years of full-time practical experience, 4 years of which must have been in a supervisory or management position.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.17 Cannabis testing facilities shall employ a full-time analyst who, at minimum must have either of the following:
  - 1. Earned a master's degree or a bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university; or
  - 2. Completed 2 years of college or university education that included coursework in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 3 years of full-time practical experience.
- <u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)</u>
- Rule 1.1.18 Cannabis testing facilities shall maintain operating documents that must include procedures for the oversight of the Cannabis testing facility and procedures to ensure accurate record keeping and adequate security measures.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.19 Cannabis testing facilities shall implement appropriate security measures designed to deter and prevent the theft of medical cannabis and unauthorized entrance into the areas containing medical cannabis.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.20 Cannabis testing facilities shall notify the Department within one (1) business day of any theft or loss of medical cannabis.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.21 Cannabis testing facilities shall not share office space with or refer patients to a practitioner.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.22 Cannabis testing facilities are subject to inspection by the Department during business hours, including but not limited to, inspection of the physical cannabis testing facility, interviews of personnel, review, inspection, and audit of records

- and documents related to the analyses of dispensary samples to verify compliance with this Chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.23 Cannabis testing facilities shall use the statewide seed-to-sale tracking system certified by the Department and provide reports as required by the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.24 Cannabis testing facilities shall notify the Department within one (1) business day if there is a change of ownership or closure of the entity.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.25 Cannabis testing facilities shall not allow an individual who is younger than twenty-one (21) years old to enter the premises of the cannabis testing facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.1.26 Cannabis testing facilities shall create and require the display of an identification badge for each medical cannabis establishment agent.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 2 Documentation Requirements for Applicants**

- Rule 1.2.1 All applicants for a cannabis testing facility registration certificate and cannabis testing facility license must complete the application document required by the Department and include the documentation outlined in this Subchapter, pay the appropriate nonrefundable application fees to the Department, and be registered and licensed by the Department prior to initiating any testing related to medical cannabis.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.2.2 All information and documents required by the Department, including but not limited to, the following must accompany an application for cannabis testing facility registration and licensing:
  - 17. The legal name of the prospective cannabis testing facility;

- The physical address of the prospective cannabis testing facility, which shall not be within one thousand (1,000) feet of the nearest property boundary line of a school, church, or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facility application unless the proposed entity has received approval from the school, church or child care facility and received the applicable waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility;
- 19. The name of each owner, principal officer, board member, and lab director of the proposed cannabis testing facility;
- 20. An attestation that the information provided to the Department to apply for a cannabis testing facility registration and license is true and correct;
- 21. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

#### 22. For each owner:

- d. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;
- e. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a cannabis dispensary, cannabis cultivation facility, cannabis processing facility, cannabis transportation entity, cannabis disposal entity or cannabis research facility.
- f. An attestation signed and dated by the owner pledging not to divert cannabis to any individual who or entity that is not allowed to possess cannabis.
- 23. <u>Verification for each principal officer or board member that they are at least 21 years of age;</u>
- 24. A valid certificate of accreditation, issued by an accreditation body, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:
  - i. Cannabinoids;
  - j. <u>Heavy metals</u>;
  - k. Microbial impurities;

- 1. Mycotoxins;
- m. Residual pesticides;
- n. Residual solvents and processing chemicals;
- o. <u>Terpenoids</u>;
- p. Foreign Material
- 25. A copy of the cannabis testing facility's most recent assessment by the laboratory's accreditation body, the laboratory's responses to any findings of non-compliance with standards or recommendations, and the corrective actions taken by the laboratory to address the findings or recommendations;
- 26. Laboratory standard operating procedures for all testing methods;
- 27. <u>Laboratory test method verification and validation documentation for all testing methods, including final data reports approved by the laboratory director, validation material package inserts and all supporting data including instrument raw data and calculation tools;</u>
- 28. Laboratory standard operating procedures for security measures;
- 29. <u>Laboratory standard operating procedures for the sampling of cannabis or cannabis products;</u>
- 30. <u>Laboratory standard operating procedures for the transportation of cannabis or cannabis products</u>
- 31. <u>Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products:</u>
- 32. Testing staff initial demonstration of capability for all applicable tests.

# Rule 1.2.3 Application and Licensing Fees:

- 4. One-time nonrefundable license application fee \$10,000
- 5. Annual licensing fee \$15,000
- 6. <u>All payments must be made through the Department's electronic payment system.</u>

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# **Subchapter 3 Cannabis Testing Facility License Renewal**

- Rule 1.3.1 Each Cannabis testing facilities must submit a completed renewal license application and appropriate renewal fee thirty (30) days prior to its current license expiration date.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.3.2 All information and documents required by the Department, including but not limited to, the following must accompany a renewal application for cannabis testing facility registration and licensing:
  - 15. The legal name of the cannabis testing facility;
  - 16. The name of each principal officer and board member of the cannabis testing facility;
  - 17. An attestation that the information provided to the Department to apply for a cannabis testing facility renewal license is true and correct;
  - 18. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;
  - 19. For each owner:
    - d. <u>An attestation signed and dated by the owner that the owner has not</u> been convicted of an excluded felony offense;
    - e. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and
    - f. An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis.
  - 20. <u>Verification for each principal officer or board member that they are at least 21 years of age;</u>
  - 21. A valid certificate of accreditation, issued by an accreditation organization, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:
    - i. Cannabinoids;

- j. <u>Heavy metals</u>;
- k. <u>Microbial impurities;</u>
- 1. <u>Mycotoxins</u>;
- m. Residual pesticides;
- n. Residual solvents and processing chemicals;
- o. <u>Terpenoids</u>;
- p. <u>Foreign materials.</u>
- 22. Laboratory standard operating procedures for all testing methods;
- 23. <u>Laboratory test method verification or validation documentation for all testing methods, including final reports signed by the laboratory director, validation material package inserts and all supporting instrument raw data and calculation tools;</u>
- 24. Laboratory standard operating procedures for security measures;
- 25. <u>Laboratory standard operating procedures for the sampling of cannabis or cannabis products;</u>
- 26. <u>Laboratory standard operating procedures for the transportation of cannabis or cannabis products</u>
- 27. <u>Laboratory standard operating procedures for the reporting of test results</u> for cannabis or cannabis products;
- 28. Testing staff ongoing demonstration of competency documentation.

#### Rule 1.3.3 Renewal Fee:

- 3. Annual renewal fee \$15,000
- 4. <u>All payments must be made through the Department's electronic payment system.</u>

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Rule 1.3.4 To maintain an active license and registration certificate, cannabis testing facilities must maintain accreditation, as defined in this Chapter.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.3.5 Any loss of accreditation status by a cannabis testing facility will result in immediate revocation of the license and registration of the cannabis testing facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.3.6 Any cannabis testing facility that has a license and registration revoked for failure to maintain accreditation, as defined in this Chapter, may file a written petition to the Department to reinstate the cannabis testing facilities' registration and license once the cannabis testing facility submits proof of accreditation, as defined in the Chapter. A reinstatement of registration or license is required prior to the cannabis testing facility resuming cannabis testing operations.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# **Subchapter 4 Cannabis Testing Facility Change of Ownership**

- Rule 1.4.1 Cannabis testing facilities must submit a completed change of ownership license application within one (1) day if there is a change of ownership.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.4.2 All information and documents required by the Department, including but not limited to, the following must accompany a change of ownership application for cannabis testing facility registration and licensing:
  - 7. The legal name of the cannabis testing facility;
  - 8. The name of each principal officer and board member of the cannabis testing facility;
  - 9. An attestation that the information provided to the Department regarding the change of ownership for a cannabis testing facility is true and correct;
  - 10. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;
  - 11. For each owner:
    - d. <u>An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;</u>

- e. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and
- f. An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis;
- 12. <u>Verification for each principal officer or board member that they are at least 21 years of age.</u>

#### **Subchapter 5: Testing Requirements and Standards**

# Rule 1.5.1 Testing Requirements for Usable Marijuana

- 3. A cultivation facility or processing facility shall test every batch of usable marijuana, in its final form, intended for sale or distribution to a qualified patient or caregiver, prior to selling or transferring the usable marijuana for the following:
  - a. Pesticides in accordance with Rule 1.5.4 of this Chapter;
  - b. Water activity and moisture content in accordance with Rule 1.5.6 of this Chapter;
  - c. THC and CBD concentration in accordance with Rule 1.5.7 of this Chapter;
  - d. Heavy Metals in accordance with Rule 1.5.8 of this Chapter;
  - e. <u>Mycotoxins in accordance with Rule 1.5.9 of this Chapter;</u>
  - f. <u>Microbiological contaminants in accordance with Rule 1.5.3 of this Chapter;</u>
  - g. <u>Terpenes in accordance with Rule 1.5.10 of this Chapter;</u>
  - h. Foreign material in accordance with Rule 1.5.11 of this Chapter.
- 4. A cultivation facility or processing facility shall test every batch of usable marijuana intended for sale or distribution to a qualified patient or caregiver for water activity and moisture content in accordance with Rule 1.5.6 of this Chapter, unless the cultivation facility or processing facility uses a method of processing that results in effective sterilization.

# Rule 1.5.2 Testing Requirements for Concentrates, Extracts, and Edibles

- 3. A cultivation facility or processing facility shall test every process lot of cannabinoid concentrate, extract or edible for sale or distribution to a qualified patient prior to selling or transferring the cannabinoid concentrate, extract or edible for the following:
  - a. <u>Microbial impurities in accordance with Rule 1.5.3 of this Chapter;</u>
  - b. <u>Pesticides in accordance with Rule 1.5.4 of this Chapter;</u>
  - c. Solvents in accordance with Rule 1.5.5 of this Chapter;
  - d. THC and CBD concentration in accordance with Rule 1.5.7 of this Chapter;
  - e. Heavy Metals in accordance with Rule 1.5.8 of this Chapter;
  - f. Mycotoxins in accordance with Rule 1.5.9 of this Chapter;
  - g. <u>Terpenes in accordance with Rule 1.5.10 of this Chapter;</u>
  - h. Foreign material in accordance with Rule 1.5.11 of this Chapter.
- 2. A cultivation facility or processing facility is exempt from testing for solvents under this rule if the cultivation facility or processing facility:
  - d. Did not use any solvent listed in Appendix A, Table 2; and
  - e. <u>Used a mechanical extraction process to separate cannabinoids</u> from the marijuana; or
  - f. <u>Used only water, animal fat or vegetable oil as a solvent to</u> separate the cannabinoids from the marijuana.
- 4. A cultivation facility or processing facility shall test a process lot of a cannabinoid concentrate or extract for microbiological contaminants in accordance with Rule 1.5.3 of this Chapter, or upon written request by the Department.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Rule 1.5.3 Standards for Testing Microbiological Contaminants

6. Usable marijuana required to be tested for microbiological contaminants shall be sampled using appropriate aseptic technique and tested by a Mississippi licensed and registered cannabis testing facility for microbial impurities.

- 7. The cannabis testing facility shall report the result of the microbial impurities testing by indicating "pass" or "fail" on the Certificate of Analysis.
- 8. The sample of inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if all of the following conditions are met:
  - a. Shiga toxin–producing Escherichia coli is not detected in 1 gram;
  - b. Salmonella spp. is not detected in 1 gram; and
  - c. <u>Pathogenic Aspergillus species A. fumigatus, A. flavus, A. niger,</u> and A. terreus are not detected in 1 gram.
- 9. The sample of non-inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if both the following conditions are met:
  - a. <u>Shiga toxin–producing Escherichia coli is not detected in 1 gram,</u> and
  - b. <u>Salmonella spp. is not detected in 1 gram.</u>
- 10. <u>If the sample fails microbial impurities testing, the batch from which the sample was collected fails microbial impurities testing and shall not be released for retail sale.</u>

### Rule 1.5.4 Standards for Testing Pesticides

- 4. <u>Usable marijuana required to be tested for pesticides shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 1.</u>
- 5. The cannabis testing facility shall report whether any Residual Pesticides are detected above the limit of detection (LOD) and shall report the result of the testing in ppms on the Certificate of Analysis. The cannabis testing facility shall indicate "pass" or "fail" on the Certificate of Analysis.
- 6. A batch fails pesticide testing if a cannabis testing facility detects the presence of a pesticide above the action levels listed in Appendix A, Table 1 in a sample:
  - a. During an initial test where no reanalysis is requested; or
  - b. Upon reanalysis as described in Rule 1.6.7 of this Chapter.

# Rule 1.5.5 Standards for Testing Solvents

- 4. <u>Usable marijuana required to be tested for solvents shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 2.</u>
- 5. The cannabis testing facility shall report the result of the residual solvents testing in ppm on the Certificate of Analysis and indicate "pass" or "fail" on the Certificate of Analysis.
- 6. A batch fails solvent testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter:
  - a. Detects the presence of a solvent above the action level listed in Appendix A, Table 2; or
  - b. <u>Calculates a RPD of more than 20 percent between the field primary result of the sample and the field duplicate result.</u>

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# Rule 1.5.6 Standards for Testing Water Activity and Moisture Content

- 4. <u>Usable marijuana shall be tested by a currently Mississippi licensed and</u> registered cannabis testing facility for:
  - a. Water activity; and
  - b. Moisture content.
- 5. <u>If a sample has a water activity rate of more than 0.65 Aw the sample fails.</u>

  <u>The cannabis testing facility shall report the result of the water activity test on the COA and indicate "pass" or "fail" on the COA.</u>
- 6. If a sample has a moisture content of more than 15 percent, the sample fails. The cannabis testing facility shall report the result of the moisture content on the COA and indicate "pass" or "fail" on the COA.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Rule 1.5.7 Standards for THC and CBD Testing

- 4. A Mississippi licensed and registered cannabis testing facility shall test for the following when testing usable marijuana for potency:
  - a. THC;

- b. THCA;
- c. <u>CBD</u>;
- d. <u>CBDA.</u>
- 5. A cannabis testing facility shall establish a limit of quantitation of 1.0 mg/g or lower for all cannabinoids analyzed and reported.
- 6. A cannabis testing facility shall report the result of the cannabinoid testing on the Certificate of Analysis, including, at minimum:
  - a. A percentage for THC, THCA, CBD, and CBDA. The dry-weight percent shall be calculated using the below equation: Dry-weight percent cannabinoid = wet-weight percent cannabinoid / (1 percent moisture / 100) (2);
  - b. A percentage for Total THC and Total CBD, if applicable;
  - c. <u>Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for THC, THCA, CBD, and CBDA;</u>
  - d. <u>Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for Total THC and Total CBD, if applicable;</u>
  - e. <u>Total cannabinoid concentration shall be calculated for concentration expressed in weight: Total cannabinoid concentration (mg/g) = (cannabinoid acid form concentration (mg/g) x 0.877) + cannabinoid concentration (mg/g);</u>
  - f. Milligrams per package for THC and CBD;
  - g. <u>Milligrams per package for Total THC and Total CBD, if applicable;</u>
  - h. Milligrams per serving for THC and CBD, if any;
  - i. <u>Milligrams per serving for Total THC and Total CBD, if any and if applicable;</u>
  - j. The results of all other cannabinoids analyzed on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams per milliliter (mg/mL) if by volume.
- 8. The sample shall be deemed to have passed the cannabinoid testing if the amount of THC does not exceed the limits below:
  - a. Cannabis flower or trim potency  $\leq 30\%$  total THC.
  - b. Cannabis tinctures, oils or concentrates < 60% total THC

- 9. A cannabis testing facility shall report the test results and indicate an overall "pass" or "fail" for the cannabinoid testing on the Certificate of Analysis.
- 10. A process lot of a cannabinoid concentrate, or extract fails potency testing if, based on an initial test where no reanalysis is requested or upon reanalysis, the amount of THC, as calculated pursuant to Rule 1.5.9 of this chapter, between samples taken from the batch exceeds 30 percent RSD.

# Rule 1.5.8 Standards for Testing for Heavy Metals

- 4. <u>Usable marijuana must be tested by a current Mississippi licensed and registered cannabis testing facility for the metals listed in Appendix A.</u>
- 5. A cannabis testing facility shall report the result of the heavy metals test on the Certificate of Analysis and indicate "pass" or "fail" on the COA.
- 6. A batch fails metals testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter detects the presence of metals above the action level listed in Appendix A, Table 3.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Rule 1.5.9 Standards for Mycotoxin Testing

- 5. <u>Usable marijuana shall be tested by a Mississippi licensed and registered cannabis testing facility for the following mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A listed</u>
- 6. <u>A batch shall be deemed to have passed mycotoxin testing if both the following conditions are met:</u>
  - a. Total of aflatoxin B1, B2, G1, and G2 does not exceed 20 µg/kg of substance, and
  - b. Ochratoxin A does not exceed 20 µg/kg of substance.
- 7. A cannabis testing facility shall report the result of the mycotoxin testing on the Certificate of Analysis and indicate "pass" or "fail" on the COA.
- 8. A batch fails mycotoxin testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter detects the presence of mycotoxins above the action level listed in Appendix A.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Rule 1.5.10 Standards for Terpenoid Testing

- 3. <u>Usable marijuana shall be tested by a Mississippi licensed and registered cannabis testing facility to determine the terpenoid profile of the sample.</u>
- A cannabis testing facility shall report the result of the terpenoid testing on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams per milliliter (mg/mL) if by volume.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

### Rule 1.5.11 Standards for Foreign Material Testing

- 5. <u>Usable marijuana shall be tested by a Mississippi licensed and registered</u> cannabis testing facility to determine whether foreign material is present.
- 6. A cannabis testing facility shall report the result of the foreign material test by indicating "pass" or "fail" on the COA.
- 7. <u>A cannabis testing facility shall perform foreign material testing on the total representative sample prior to sample homogenization.</u>
- 8. When the licensed laboratory performs foreign material testing, at minimum, the laboratory shall do all of the following:
  - c. Examine both the exterior and interior of the dried flower sample, and;
  - d. <u>Examine the exterior of the cannabis product sample.</u>
- 7. The sample shall be deemed to have passed the foreign material testing if the presence of foreign material does not exceed:
  - e. <u>1/4 of the total sample area covered by sand, soil, cinders, or dirt;</u>
  - f. 1/4 of the total sample area covered by mold;
  - g. <u>1 insect fragment, 1 hair, or 1 count mammalian excreta per 3.0 grams; or</u>
  - h. <u>1/4 of the total sample area covered by an imbedded foreign material.</u>
- 8. <u>If the sample fails foreign material testing, the batch from which the sample was collected fails foreign material testing and shall not be released for retail sale.</u>

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

### **Subchapter 6: Failed Test Samples**

- Rule 1.6.1 If a sample fails any initial test, the cannabis testing facility that did the testing may reanalyze the sample. If the sample passes, another cannabis testing facility must resample the batch and confirm that result in order for the batch to pass testing.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.6.2 If a sample fails a test or a reanalysis under Rule 1.6.1 of this Chapter, the batch:
  - 3. May be remediated or sterilized in accordance with this subchapter; or
  - 4. <u>If it is not or cannot be remediated or sterilized under this rule, it must be destroyed in a manner specified by the Department.</u>
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.6.3 If a medical cannabis establishment sells or transfers a batch that has failed a test, the medical cannabis establishment must notify the medical cannabis establishment to which the product is sold or transferred of the failed test within 24 hours of receipt of the COA.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.6.4 Failed microbiological contaminant testing.
  - 5. If a sample from a batch of usable marijuana fails microbiological contaminant testing, the batch may be used to make a cannabinoid concentrate or extract if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.
  - 6. If a sample from a batch of a cannabinoid concentrate or extract fails microbiological contaminant testing, the batch may be further processed, if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.
  - 7. A batch that is sterilized in accordance with subsection (1) or (2) of this rule must be sampled and tested in accordance with this Chapter and must be tested, if not otherwise required for that product, for microbiological contaminants, solvents and pesticides.
  - 8. A batch that fails microbiological contaminant testing after undergoing a sterilization process in accordance with subsection (1) or (2) of this rule must be destroyed in a manner specified by the Department.

# Rule 1.6.5 Failed solvent testing.

- 4. <u>If a sample from a batch fails solvent testing, the batch may be remediated using procedures that would reduce the concentration of solvents to less than the action level.</u>
- 5. A batch that is remediated in accordance with subsection (1) of this rule must be sampled and tested in accordance with this Chapter and must be tested if not otherwise required for that product under this Chapter, for solvents and pesticides.
- 6. A batch that fails solvent testing that is not remediated or that if remediated fails testing must be destroyed in a manner specified by the Department.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Rule 1.6.6 Failed water activity testing and moisture testing.

- 3. <u>If a sample from a batch of usable marijuana fails for water activity or moisture activity, the batch from which the sample was taken may:</u>
  - a. Be used to make a cannabinoid concentrate or extract; or
  - b. Continue to dry or cure.
- 4. A batch that undergoes additional drying or curing as described in subsection (1) of this rule must be sampled and tested in accordance with this Chapter.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Rule 1.6.7 Failed pesticide testing.

2. <u>If a sample from a batch fails pesticide testing, the batch may not be remediated and must be destroyed in a manner approved by the Department and identified on the Department's website.</u>

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Rule 1.6.8 Failed potency testing.

- 3. <u>Usable marijuana that fails potency testing under Rule 1.5.7 of this Chapter may be repackaged in a manner that enables the item to meet the standard in Rule 1.5.7 of this Chapter.</u>
- 4. <u>Usable marijuana that is repackaged in accordance with this section must be sampled and tested in accordance with these rules.</u>

# Rule 1.6.9 Failed remediation

- 6. <u>If a sample fails a test after undergoing remediation or sterilization as permitted under this rule, the batch must be destroyed in a manner approved by the Department.</u>
- 7. A cultivation facility or processing facility must inform a cannabis testing facility prior to samples being taken that the batch has failed a test and is being retested after undergoing remediation or sterilization.
- 8. A cultivation facility or processing facility must, as applicable:
  - a. <u>Have detailed procedures for sterilization processes to remove microbiological contaminants and for reducing the concentration of solvents.</u>
  - b. <u>Document all sampling, testing, sterilization, remediation and destruction that are a result of failing a test under these rules.</u>
- 9. A cannabis or cannabis product batch may only be remediated twice. If the batch fails after a second remediation attempt and the second retesting, the entire batch shall be destroyed in a manner approved by the Department.
- 10. Within one business day of completing the required analyses of a representative sample obtained from a remediated cannabis or cannabis product batch, the cannabis testing facility shall upload the COA information into the seed-to-sale system.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 7: Tentative Identification of Compounds**

- Rule 1.7.1 Tentatively Identified Compounds (TICs) are compounds detected in a sample using gas chromatography mass spectrometry that are not among the target analytes for the residual solvent analysis.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.7.2 The Department may initiate an investigation of a cultivation facility or processing facility upon receipt of a TICs report from a cannabis testing facility and may require a cultivation facility or processing facility to submit samples for additional testing, including testing for analytes that are not required by these rules, at the cultivation facility or processing facility's expense.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# **Subchapter 8: Certificate of Analysis ("COA")**

- Rule 1.8.1 The cannabis testing facility shall generate a Certificate of Analysis for each representative sample that the cannabis testing facility analyzes.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.2 The cannabis testing facility shall ensure that the COA contains the results of all required analyses performed for the representative sample.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.3 The cannabis testing facility shall, within 1 business day of completing all analyses of a sample, upload the COA into the seed-to-sale system.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.4 The cannabis testing facility shall not release to any person any cumulative or individual test results prior to completing all analyses and providing the COA to the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.5 The COA shall contain, at minimum, the following information:
  - 12. The term "Regulatory Compliance Testing" in font no smaller than 14-point, which shall appear in the upper-right corner of each page of the COA. No text or images shall appear above the term "Regulatory Compliance Testing" on any page of the COA.
  - 13. The cannabis testing facility's name, premises address, and license number; dispensary's authorized to engage in distribution's name, premises address, and license number; cultivator's, or processor's name, premises address, and license number;
  - 14. Batch number of the batch from which the sample was obtained. For cannabis and cannabis products that are already packaged at the time of sampling, the labeled batch number on the packaged cannabis and cannabis products shall match the batch number on the COA;
  - 15. <u>Sample identifying information, including matrix type and unique sample identifiers;</u>
  - 16. Sample history, including the date collected, the date received by the cannabis testing facility, and the date(s) of sample analyses and corresponding testing results;

- 17. A picture of the sample of cannabis and cannabis products. If the sample is pre-packaged, the picture must include an unobstructed image of the packaging;
- 18. For dried flower samples, the total weight of the batch, in grams or pounds, and the total weight, of the representative sample in grams;
- 19. For cannabis product or pre-rolls samples, the total unit count of both the representative sample and the total batch size;
  - a. Measured density of the cannabis and cannabis products;
- 20. The analytical methods, analytical instrumentation used, and corresponding Limits of Detection ("LOD)" and Limits of Quantitation ("LOQ");
- 21. An attestation on the COA from the cannabis testing facility supervisory or management employee that all LQC samples required by this Chapter were performed and met the acceptance criteria; and
- 22. <u>Analytes detected during the analyses of the sample that are unknown, unidentified, or injurious to human health if consumed, if any.</u>
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.6 The cannabis testing facility shall report test results for each representative sample on the COA as follows: Indicate an overall "pass" or "fail" for the entire batch;
  - 7. When reporting qualitative results for each analyte, the cannabis testing facility shall indicate "pass" or "fail";
  - 8. When reporting quantitative results for each analyte, the cannabis testing facility shall use the appropriate units of measurement as required under this chapter;
  - 9. When reporting results for each test method, the cannabis testing facility shall indicate "pass" or "fail";
  - 10. When reporting results for any analytes that were detected below the analytical method LOQ, indicate "<LOQ", notwithstanding cannabinoid results;
  - 11. When reporting results for any analytes that were not detected or detected below the LOD, indicate "ND"; and
  - 12. Indicate "NT" for any test that the cannabis testing facility did not perform.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.7 The cannabis testing facility supervisory or management employee shall validate the accuracy of the information contained on the COA and sign and date the COA.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.8.8 The cannabis testing facility supervisory or management employee may request to amend a COA to correct minor errors and upload into the seed to sale system.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# **Subchapter 9: Post Testing Sample Requirements**

- Rule 1.9.1 The cannabis testing facility shall retain the reserve sample, consisting of any portion of a sample that was not used in the testing process. The reserve sample shall be kept at minimum, for 45 business days after the analyses, after which time it may be destroyed and denatured to the point the material is rendered unrecognizable and unusable.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.9.2 The cannabis testing facility shall securely store the reserve sample in a manner that prohibits sample degradation, contamination, and tampering.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.9.3 The cannabis testing facility shall provide the reserve sample to the Department upon request.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# **Subchapter 10: Transportation of Samples**

- Rule 1.10.1 Employees/agents of the cannabis testing facility are responsible for the collection and transportation of testing samples.
- <u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session</u> 2022, Section 4(1) and (3)
- Rule 1.10.2 Employees/agents of the cannabis testing facility must utilize an electronic inventory management system to create and maintain transportation manifests documenting all transport of medical marijuana and medical marijuana products throughout the State of Mississippi.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.3 When transporting medical cannabis or medical cannabis products, all cannabis testing facilities and their employees/agents shall provide copies of the inventory manifests to each originating and receiving medical cannabis establishment at the time the product changes possession.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.4 The copy of the inventory manifest to be left with the originating medical cannabis establishment shall include, at a minimum:
  - f. The license number, business name, address, and contact information of the originating medical cannabis establishment;
  - g. A complete inventory of the medical cannabis and medical cannabis products to be transported, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);
  - h. The date of transportation and the approximate time of departure;
  - i. <u>Printed names, signatures, and identification card numbers of personnel accompanying the transport;</u>
  - j. The license number(s), business name(s), address(es), and contact information for all end point recipients.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.5 The copy of the inventory manifest to be left with the receiving medical cannabis establishment shall include, at a minimum:
  - g. The license number, business name, address, and contact information for the receiving medical cannabis establishment;
  - h. The license number, business name, address, and contact information of the originating medical cannabis establishment;
  - i. A complete inventory of the medical cannabis and medical cannabis products delivered to the receiving medical cannabis establishment, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);
  - j. The date and estimated time of arrival;
  - k. The printed names, signatures, and identification card numbers of the personnel accompanying the transport; and
  - 1. The printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving medical cannabis establishment.
- <u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session</u> 2022, <u>Section 4(1) and (3)</u>
- Rule 1.10.6 Transportation manifests should reflect a complete chain of custody of all medical cannabis and medical cannabis products being transported, including all instances in which the medical cannabis and medical cannabis products are stored.
- <u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session</u> 2022, Section 4(1) and (3)

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.7 Originating and receiving licensed entities shall maintain copies of transportation manifests and inventory records logging the quantity of medical cannabis or medical cannabis products received for at least three (3) years from the date of receipt.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.10.8 A transportation manifest must not be altered after departing from the originating medical cannabis establishment's premises, except for the addition of the printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving cannabis testing facility.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 11: Cannabis Testing Facility Quality Assurance**

- Rule 1.11.1 The cannabis testing facility shall develop and implement a Quality Assurance (QA) program to assure the reliability and validity of the analytical data produced by the cannabis testing facility. The QA program shall, at minimum, include a written QA manual that addresses the following:
  - 17. Quality control procedures;
  - 18. <u>Cannabis testing facility organization and employee training and responsibilities, including good laboratory practice (GLP);</u>
  - 19. QA objectives for measurement data;
  - 20. Traceability of data and analytical results;
  - 21. Instrument maintenance, calibration procedures, and frequency;
  - 22. Performance and system audits.:
  - 23. <u>Corrective action procedures</u>;
  - 24. <u>Steps to change processes when necessary:</u>
  - 25. Record retention and document control;
  - 26. Test procedure standardization; and
  - 27. Method validation;
  - 28. <u>Chain of custody protocols;</u>
  - 29. Premise and sample security;

- 30. <u>Sample handling, including sample receipt, identification, rejection,</u> storage and destruction;
- 31. Contingency plans for data that is not within control limits, or is otherwise unacceptable for analysis; and
- 32. Disposal of marijuana and laboratory waste.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.11.2 The supervisory or management cannabis testing facility employee shall annually review, amend if necessary, and approve the QA program and manual both when they are created and when there is a change in methods, testing facility equipment, or the supervisory or management testing facility employee.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.11.3 The cannabis testing facilities standard operating procedures for testing methods shall include the following:
  - 16. The name of the testing method;
  - 17. A list of all analytes used in the testing method;
  - 18. The applicable matrix or matrices;
  - 19. Sample receipt and acceptance;
  - 20. Method sensitivity;
  - 21. Potential interferences;
  - 22. Analytical instrument and equipment used;
  - 23. Consumable supplies, reagents, and standards;
  - 24. Sample preservation and hold time;
  - 25. Type, frequency, and acceptable criteria for quality control samples;
  - 26. Type, frequency, and acceptable criteria for calibration standards;
  - 27. Procedures for analyzing batch samples;
  - 28. Data quality assessment and acceptance criteria;
  - 29. Calibration of results; and
  - 30. Reagent solution and reference material preparation.

<u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)</u>

### **Subchapter 12: Cannabis Testing Facility Quality Control Samples**

- Rule 1.12.1 The cannabis testing facility shall use Quality Control samples (QC) and adhere to good, approved laboratory practice ("GLP") in the performance of each analysis according to the specifications of this Chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.2 The cannabis testing facility shall analyze QC samples in the same manner as the cannabis testing facility analyzes cannabis and cannabis products samples.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.3 The cannabis testing facility shall use at least one negative control, one positive control, and one cannabis testing facility replicate sample in each analytical batch for each target organism during microbial testing. If one of the controls produces unexpected results, the samples shall be re- prepped and reanalyzed with a new set of controls.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.4 If the result of the microbial analyses is outside the specified acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

<b>Testing facility</b>	Acceptance	Corrective Action
<b>Quality</b>	<u>Criteria</u>	
<u>Control</u>		
<b>Sample</b>		
Positive control	<u>Produces</u>	Re-prep and reanalyze the entire analytical
	<u>expected</u>	batch, once. If problem persists, locate and
	result, positive	remedy the source of unexpected result,
	<u>result</u>	then re-prep samples and reanalyze with a
		new set of controls.
Negative control	<u>Produces</u>	Re-prep and reanalyze the entire analytical
	<u>expected</u>	batch, once. If problem persists, locate and
	result, negative	remedy the source of unexpected result,
	<u>result</u>	then re-prep samples and reanalyze with a
		new set of controls.

<u>laboratory</u>	Sample results	Reanalyze sample and associated replicate
replicate sample	must concur	sample once. If problem persists, re-prep
		samples and reanalyze.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.5 The cannabis testing facility shall prepare and analyze at least one of each of the following QC samples for each analytical batch:
  - 6. Method Blank;
  - 7. Laboratory control sample (LCS); and
  - 8. <u>Duplicate laboratory control sample; and</u>
  - 9. <u>Matrix spike sample; and</u>
  - 10. <u>Duplicate matrix spike sample</u>
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.6 The cannabis testing facility shall analyze, at minimum, a continuing calibration verification ("CCV") sample at the beginning of each analytical sequence and every 10 samples thereafter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.7 If the result of the chemical analyses is outside the specified acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Quality Control Sample	Acceptance Criteria	Corrective Action
Method Blank sample	Not to exceed LOQ	Reanalyze entire analytical batch once.  If method blank is still greater than the LOQ for any analyte, locate the source of contamination then re-prep samples and reanalyze.
Laboratory Control Sample	Percent recovery 70% to 130%	Reanalyze the entire analytical batch, once. If problem persists, re-prep samples and reanalyze or re-run the initial calibration curve.

Duplicate Laboratory Control Sample	<u>RPD ≤30%</u>	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
Matrix spike sample	Percent recovery between 70% to 130%	Reanalyze sample and associated matrix spike sample once. If problem persists, re-prep samples and reanalyze.
Duplicate Matrix Spike Sample	<u>RPD ≤30%</u>	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
CCV	Percent recovery between 70% to 130%	Reanalyze all samples that followed the last CCV that met the acceptance criteria. If CCV still fails, re-run the initial calibration curve and all samples in the analytical sequence.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Rule 1.12.8 A cannabis testing facility shall use the following calculation for determining Relative Percentage Difference (RPD):

$$RPD = \frac{\text{(sample result - duplicate result)}}{\text{(sample result - duplicate result)/2}}$$

<u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)</u>

Rule 1.12.9 A cannabis testing facility shall use the following calculation for determining Relative Standard Deviation (RSD):

$$\%RSD = \frac{s}{x} \times 100\%$$

$$s = \sqrt{\sum_{i=0}^{n} \frac{(x_i - \tilde{x})^2}{(n-1)}}$$

For purposes of this rule:

s = standard deviation.

 $\underline{n} = total number of values.$ 

 $x_i$  = each individual value used to calculate mean.

x = mean of n values.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.10 For calculating both RPD and RSD if any results are less than the LOQ, the absolute value of the LOQ is used in the equation.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.11 If any analyte is detected above any action level, as described in this chapter, the sample shall be re-prepped and reanalyzed in replicate within another analytical batch.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.12 For quantitative analyses, the re-prepped sample and its associated replicate shall meet the acceptance criteria of RPD ≤30%.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.13 For qualitative analyses, the re-prepped sample and its associated replicate results must concur.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.14 If any quality control sample produces a result outside of the acceptance criteria, the cannabis testing facility cannot report the result and the entire batch cannot be released for retail sale. The cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.15 If the cannabis testing facility determines that the result is a false-positive or a false-negative, the Department may ask for the cannabis testing facility to resample or re-test.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.12.16 The cannabis testing facility shall compile and generate one LQC sample report for each analytical batch that includes LQC acceptance criteria, measurements, analysis date, and matrix.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

## Subchapter 13: Limits of Detection (LOD) and Limits of Quantitation (LOQ) for Quantitative Analyses

- Rule 1.13.1 The cannabis testing facility shall calculate the LOD for chemical method analyses according to any of the following methods:
  - 4. Signal-to-noise ratio of between 3:1 and 2:1;
  - 5. <u>Standard deviation of the response and the slope of calibration curve using a minimum of 7 spiked blank samples calculated as follows;</u>
    - LOD = (3.3 x standard deviation of the response) / slope of the calibration curve; or
  - 6. A method published by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA).

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.13.2 The cannabis testing facility shall calculate the LOQ for chemical method analyses according to any of the following methods:
  - 3. Signal-to-noise ratio of 10:1, at minimum;
  - 4. <u>Standard deviation of the response and the slope using a minimum of 7 spiked Blank samples calculated as follows:</u>
    - $LOQ = (10 \times standard\ deviation\ of\ the\ response) / slope\ of\ the\ calibration\ curve;\ or$
  - 4. <u>A method published by the USFDA or the USEPA.</u>

<u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)</u>

#### **Subchapter 14: Cannabis Testing Facility Data Package**

- Rule 1.14.1 The cannabis testing facility shall compile and generate one data package for each representative sample that the cannabis testing facility analyzes.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.14.2 The cannabis testing facility shall create a data package and provide to the Department immediately upon request.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 15: Required Proficiency Testing**

- Rule 1.15.1 The cannabis testing facility shall participate in a proficiency testing program provided by an organization that operates in conformance with the requirements of ISO/IEC 17043, at least once every six months.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.2 The cannabis testing facility shall annually, successfully participate in a proficiency testing program for each of the following test methods:
  - 9. Cannabinoids;
  - 10. <u>Heavy metals</u>;
  - 11. <u>Microbial impurities;</u>
  - 12. Mycotoxins;
  - 13. Residual pesticides;
  - 14. Residual solvents and processing chemicals;
  - 15. Terpenoids; and,
  - 16. <u>Foreign Material</u>
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.3 The cannabis testing facility shall report all analytes available by the proficiency testing program provider and for which the licensee is required to test as required under this chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.4 The cannabis testing facility shall participate in the proficiency testing program by following the cannabis testing facility's existing SOPs for testing cannabis and cannabis products.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.5 The cannabis testing facility shall rotate the proficiency testing program among the cannabis testing facility employees who perform the test methods.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.6 Cannabis testing facility employees who participate in a proficiency testing program shall sign the corresponding analytical reports or attestation statements to certify that the proficiency testing program was conducted in the same manner as the cannabis testing facility tests of cannabis and cannabis products.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.7 A supervisory or management cannabis testing facility employee shall review and verify the accuracy of results reported for all proficiency testing program samples analyzed.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.15.8 The cannabis testing facility shall request the proficiency testing program provider to send results concurrently to the Department, if available, or the cannabis testing facility shall provide the proficiency testing program results to the Department within 3 business days after the cannabis testing facility receives notification of their test results from the proficiency testing program provider.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 16: Proficiency Testing Performance**

- Rule 1.16.1 The cannabis testing facility shall be deemed to have successfully participated in a proficiency testing program for an analyte tested in a specific method if the test results demonstrate a "satisfactory" or otherwise proficient performance determination by the proficiency testing program provider.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.16.2 The cannabis testing facility may not report test results for analytes that are deemed by the proficiency testing program provider as "unacceptable," "questionable," "unsatisfactory", or otherwise deficient.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.16.3 The cannabis testing facility may resume reporting test results for analytes that were deemed "unacceptable," "questionable," "unsatisfactory", or otherwise deficient, only if both of the following conditions are met:
  - 3. The cannabis testing facility satisfactorily remedies the cause of the failure for each analyte; and
  - 4. The cannabis testing facility submits, to the Department, a written corrective action report demonstrating how the cannabis testing facility has fixed the cause of the failure.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 17: Cannabis Testing Facility Audits**

- Rule 1.17.1 The cannabis testing facility shall conduct an internal audit at least once per year or in accordance with the ISO/IEC 17025 accrediting body's requirement, whichever is more frequent.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.17.2 The internal audit shall include all the components required by the ISO/IEC 17025 internal-audit standards.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.17.3 Within three (3) business days of completing the internal audit, the cannabis testing facility shall submit the results of the internal audit to the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

- Rule 1.17.4 A cannabis testing facility shall contract with an independent, third-party auditor certified to conduct on-site audits at least annually or in accordance with ISO/IEC 17025 accrediting body's requirements standards.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.17.5 Within three (3) business days of receiving the accrediting body on-site audit findings, the cannabis testing facility shall submit the report to the Department.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.17.6 The Department reserves the rights to perform additional audits as needed and without advance notice.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 18: Cannabis Testing Facility Employee Qualifications**

- Rule 1.18.1 The cannabis testing facility may only employ persons who are at least 21 years of age and possess a current Department issued Medical Cannabis Establishment Agent Work Permit.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.18.2 Medical Cannabis Establishment agents of all cannabis testing facilities shall apply for and receive a valid Medical Cannabis Establishment Agent Work Permit from the Department before beginning employment with any cannabis testing facility.
- <u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session</u> 2022, Section 4(1) and (3)
- Rule 1.18.3 Work permits are not transferable to other employees or individuals.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.18.4 Medical Cannabis Establishment agents shall be required to display current work permits issued by the Department on their person in plain view while at the cannabis testing facility.

- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.18.5 The cannabis testing facility shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned functions.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.18.6 The cannabis testing facility shall ensure and document that each cannabis testing facility employee meets the employee qualifications.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

# Subchapter 19: Denial of Application for or Renewal of a Cannabis Testing Facility License or Registration

- Rule 1.19.1 The Department may deny an application for or renewal of a license or registration for any of the following reasons:
  - 6. <u>Failure to provide the information required in this Chapter;</u>
  - 7. Failure to meet the requirements set forth in this Chapter;
  - 8. Provision of misleading, incorrect, false or fraudulent information;
  - 9. Failure to pay all applicable fees as required;
  - 10. Any other ground that serves the purposes of this Chapter.
- Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)
- Rule 1.19.2 If the Department denies an application for or renewal of a license or registration, the Department shall notify the applicant in writing of the Department's decision, including the reason for denial.
- <u>Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session</u> 2022, Section 4(1) and (3)
- Rule 1.19.3 Denial of an application or renewal is considered a final Department action, is subject to judicial review as provided in Section 31 of the Mississippi Medical Cannabis Act.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### **Subchapter 20: Fines, Suspensions and Revocations**

Rule 1.20.1 The Department may fine, suspend or revoke the license or registration of a cannabis testing for a violation of this Chapter or any rules and regulations under this Chapter by the cannabis testing facility or any of its employees or agents.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Rule 1.20.2 If a cannabis testing facility wishes to appeal the Department's decision, the cannabis testing facility shall file its administrative appeal in writing to the Department within twenty (20) days of receipt of the initial notice. If a cannabis testing facility fails to appeal the initial notice within twenty (20) days, the Departments decision becomes final. Any person or entity aggrieved by a final decision of the Department under the provisions of this Chapter may petition for judicial review of the decision or order as provided in Section 31 of the Mississippi Medical Cannabis Act.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

Rule 1.20.3 A cannabis testing facility may continue to possess cannabis under its license during a suspension but shall not receive, transfer or test cannabis during the suspension period.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) and (3)

#### Appendix A

Key to this Appendix:

- <u>CAS Number = Chemical Abstract Services Registry number</u>
- <u>CFU = Colony-forming unit, a method to estimate the number of viable bacteria or fungal cells in a sample.</u>

A. Microbial Contaminants		
<b>Analyte</b>	Maximum Allowable Contaminants	Required Action
Escherichia coli	<u>100 CFU/g</u>	Remediate and retest, or Destroy

Salmonella spp.	Detectable in 1	<u>Destroy</u>	
Aspergillus flavus, Aspergillus fumigatus, Aspergillus niger, and Aspergillus terreus	Inhalable: Detectable	Remediate and retest, Remediate and use for preparing an extract or a concentrate, or destroy	
Mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A	Marijuana product, except a marijuana product intended for topical application, prepared from an extract or concentrate of medical marijuana:		<u>Destroy</u>
	B. Heavy N	<u> Ietals</u>	
<u>Analyte</u>	Maximum Allowable (	<b>Concentration</b>	Required Action
Arsenic Cadmium Lead Mercury	0.4 ppm 0.4 ppm 1.0 ppm 1.2 ppm		Remediate and retest, or Destroy
	<u>C. Residual S</u>	<u>Solvents</u>	<u> </u>
<u>Analyte</u>	<u>CAS Number</u>	Maximum Allowable Concentration	Required Action
Acetone	<u>67-64-1</u>	<u>1,000 ppm</u>	
<u>Acetonitrile</u>	<u>75-05-8</u>	<u>410 ppm</u>	
<u>Benzene</u>	<u>71-43-2</u>	<u>2 ppm</u>	
Butanes (measured as the cumulative residue of n-butane and isobutane)	106-97-8 and 75-28-5, respectively	<u>5,000 ppm</u>	
Chloroform	<u>67-66-3</u> <u>60 ppm</u>		
<u>Dichloromethane</u>	<u>75-09-2</u> <u>600 ppm</u>		
<u>Ethanol</u>	<u>64-17-5</u>	<u>5,000 ppm</u>	Remediate and retest,
Ethyl Acetate	<u>141-78-6</u>	<u>5,000 ppm</u>	or Destroy
Ethyl Ether	60-29-7	5,000 ppm	
<u>Heptane</u>	142-82-5	<u>5,000 ppm</u>	
	290 ppm		

(measured as the cumulative residue of n-hexane, 2-methylpentane, 3-methylpentane, 2,2-dimethylbutane, and 2,3-dimethylbutane)	110-54-3, 107-83-5, and 79-29-8		
Isopropyl Acetate	<u>108-21-4</u>	<u>5,000 ppm</u>	
<u>Methanol</u>	<u>67-56-1</u>	3,000 ppm	
Pentanes (measured as the cumulative residue of n-pentane, iso- pentane, and neo- pentane)	109-66-0, 78-78-4, and 463-82-1	<u>5,000 ppm</u>	
2-Propanol (IPA)	<u>67-63-0</u>	<u>5,000 ppm</u>	
<u>Propane</u>	<u>74-98-6</u>	<u>5,000 ppm</u>	
Toluene	108-88-3	890 ppm	Remediate and retest,
Xylenes (measured as the cumulative residue of 1,2-dimethylbenzene, 1,3-dimethylbenzene, and 1,4-dimethylbenzene, and the non-xylene, ethylbenzene)  dimethylbenzene, and 1,4-dimethylbenzene, and 1,4-dimethylbenzene, and the non-xylene, ethylbenzene, and the non-xylene, ethylbenzene, and the non-xylene, ethylbenzene)	1330-20-7 (95-47-6,108- 38-3, and 106-42- 3, and 100-41-4)	2,170 ppm	or Destroy
D. Pesticides, Fungicides, Growth Regulators			
<u>Analyte</u>	CAS Number	Maximum Allowable Concentration	Required Action
Abamectin	71751-41-2	<u>0.5 ppm</u>	Destroy

Acephate	30560-19-1	<u>0.4 ppm</u>
Acequinocyl	57960-19-7	2.0 ppm
Acetamiprid	135410-20-7	0.2 ppm
Aldicarb	116-06-3	0.4 ppm
Azoxystrobin	131860-33-8	0.2 ppm
Bifenazate	149877-41-8	0.2 ppm
Bifenthrin	82657-04-3	0.2 ppm
Boscalid	188425-85-6	<u>0.4 ppm</u>
<u>Carbaryl</u>	63-25-2	<u>0.2 ppm</u>
Carbofuran	1563-66-2	<u>0.2 ppm</u>
<u>Chlorantraniliprole</u>	500008-45-7	<u>0.2 ppm</u>
Chlorfenapyr	122453-73-0	1.0 ppm
Chlormequat chloride	<u>7003-89-6</u>	<u>0.2 ppm</u>
Chlorpyrifos	<u>2921-88-2</u>	<u>0.2 ppm</u>
Clofentezine	<u>74115-24-5</u>	<u>0.2 ppm</u>
<u>Cyfluthrin</u>	<u>68359-37-5</u>	1.0 ppm
Cypermethrin	<u>52315-07-8</u>	<u>1.0 ppm</u>
<u>Daminozide</u>	<u>1596-84-5</u>	1.0 ppm
DDVP (Dichlorvos)	62-73-7	<u>0.1 ppm</u>
<u>Diazinon</u>	<u>333-41-5</u>	<u>0.2 ppm</u>
<u>Dimethoate</u>	<u>60-51-5</u>	<u>0.2 ppm</u>
<u>Ethoprophos</u>	<u>13194-48-4</u>	<u>0.2 ppm</u>
<u>Etofenprox</u>	80844-07-1	<u>0.4 ppm</u>
<u>Etoxazole</u>	<u>153233-91-1</u>	<u>0.2 ppm</u>
<u>Fenoxycarb</u>	<u>72490-01-8</u>	<u>0.2 ppm</u>
<u>Fenpyroximate</u>	<u>134098-61-6</u>	<u>0.4 ppm</u>
<u>Fipronil</u>	120068-37-3	<u>0.4 ppm</u>
Flonicamid	<u>158062-67-0</u>	<u>1.0 ppm</u>
<u>Fludioxonil</u>	<u>131341-86-1</u>	<u>0.4 ppm</u>
<u>Hexythiazox</u>	<u>78587-05-0</u>	<u>1.0 ppm</u>
<u>Imazalil</u>	<u>35554-44-0</u>	<u>0.2 ppm</u>
<u>Imidacloprid</u>	<u>138261-41-3</u>	<u>0.4 ppm</u>
Kresoxim-methyl	<u>143390-89-0</u>	<u>0.4 ppm</u>
<u>Malathion</u>	<u>121-75-5</u>	<u>0.2 ppm</u>
<u>Metalaxyl</u>	<u>57837-19-1</u>	<u>0.2 ppm</u>
<u>Methiocarb</u>	<u>2032-65-7</u>	<u>0.2 ppm</u>
<u>Methomyl</u>	<u>16752-77-5</u>	<u>0.4 ppm</u>
Methyl parathion	<u>298 -00 - 0</u>	<u>0.2 ppm</u>
<u>Myclobutanil</u>	<u>88671-89-0</u>	<u>0.2 ppm</u>

Naled	<u>300-76-5</u>	<u>0.5 ppm</u>
<u>Oxamyl</u>	<u>23135-22-0</u>	<u>1.0 ppm</u>
Paclobutrazol	<u>76738-62-0</u>	0.4 ppm
Permethrins		
(measured as the	<u>52645-53-1(54774-</u>	
cumulative residue of	45-7 and	<u>0.2 ppm</u>
cis- and trans-	<u>51877-74-8)</u>	
<u>isomers)</u>		
<u>Phosmet</u>	<u>732-11-6</u>	<u>0.2 ppm</u>
Piperonyl_butoxide	<u>51-03-6</u>	2.0 ppm
<u>Prallethrin</u>	<u>23031-36-9</u>	<u>0.2 ppm</u>
<u>Propiconazole</u>	<u>60207-90-1</u>	<u>0.4 ppm</u>
Propoxur	<u>114-26-1</u>	<u>0.2 ppm</u>
Pyrethrins (measured as the cumulative residue of pyrethrin 1, cinerin 1 and jasmolin 1)	8003-34-7(121-21-1, 25402- 06-6, and 4466-14- 2)	1.0 ppm
<u>Pyridaben</u>	<u>96489-71-3</u>	<u>0.2 ppm</u>
Spinosad	<u>168316-95-8</u>	<u>0.2 ppm</u>
<u>Spiromesifen</u>	<u>283594-90-1</u>	<u>0.2 ppm</u>
<u>Spirotetramat</u>	<u>203313-25-1</u>	<u>0.2 ppm</u>
<u>Spiroxamine</u>	<u>118134-30-8</u>	<u>0.4 ppm</u>
<u>Tebuconazole</u>	<u>107534-96-3</u>	<u>0.4 ppm</u>
<u>Thiacloprid</u>	<u>111988-49-9</u>	<u>0.2 ppm</u>
<u>Thiamethoxam</u>	<u>153719-23-4</u>	<u>0.2 ppm</u>
<u>Trifloxystrobin</u>	<u>141517-21-7</u>	<u>0.2 ppm</u>
<u> </u>		

### E. Potency

<u>Analyte</u>	<u>Labelling</u>	Required Action
Tetrahydrocan nabinolic acid (THC-A)  Delta-9- tetrahydrocann abinol (Δ9- THC)	<u>Label claim is not within +/- 20 % of tested</u> value	Revise label as necessary
Cannabidiolic acid (CBD-A) Cannabidiol (CBD)		

Terpenoids (primary and secondary)	Label claim is not within +/- 10 % of tested value	Destroy		
	F. Moisture Content and Water Activity Testing			
Measurement	Allowable Measurement	Required Action		
Water activity	> 0.65 Aw	Destroy		
Moisture content	<u>&gt; than 15%</u>	Remediate and retest		